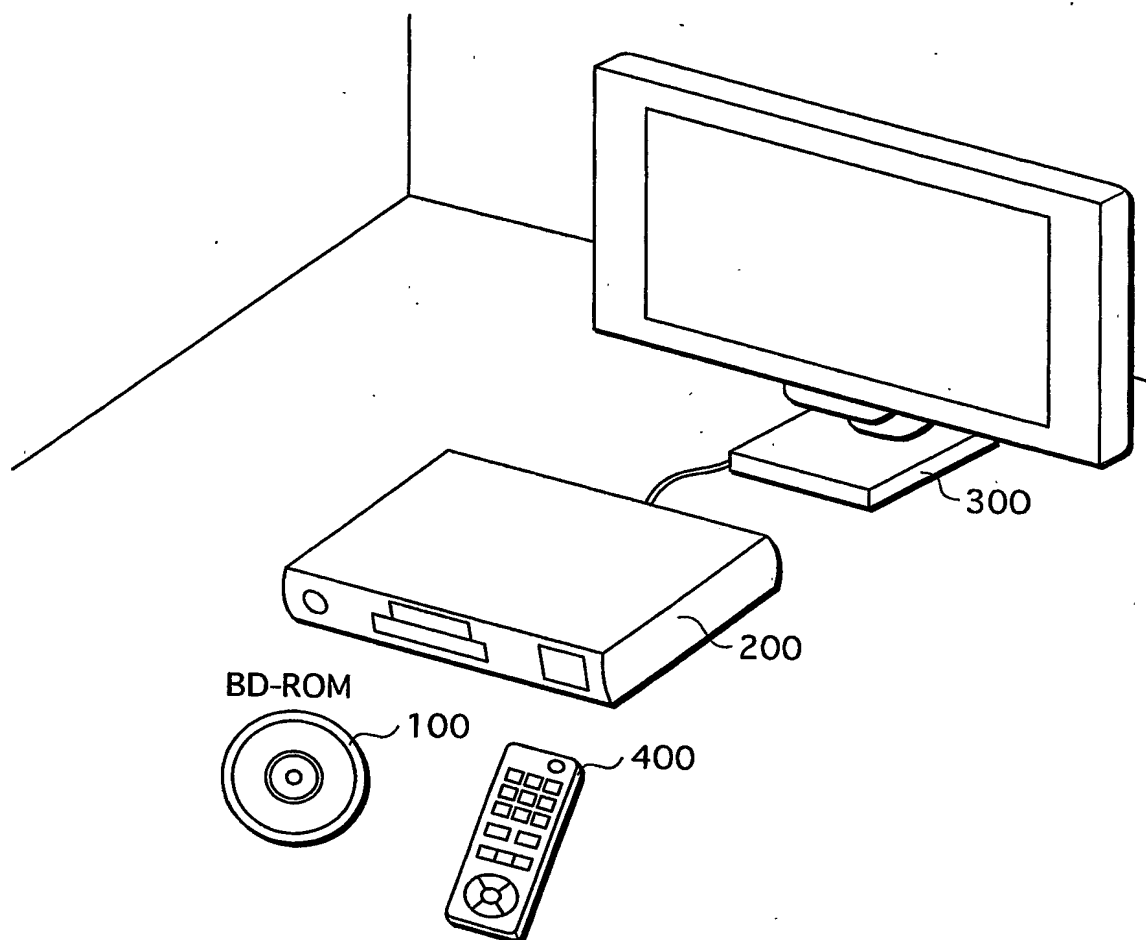
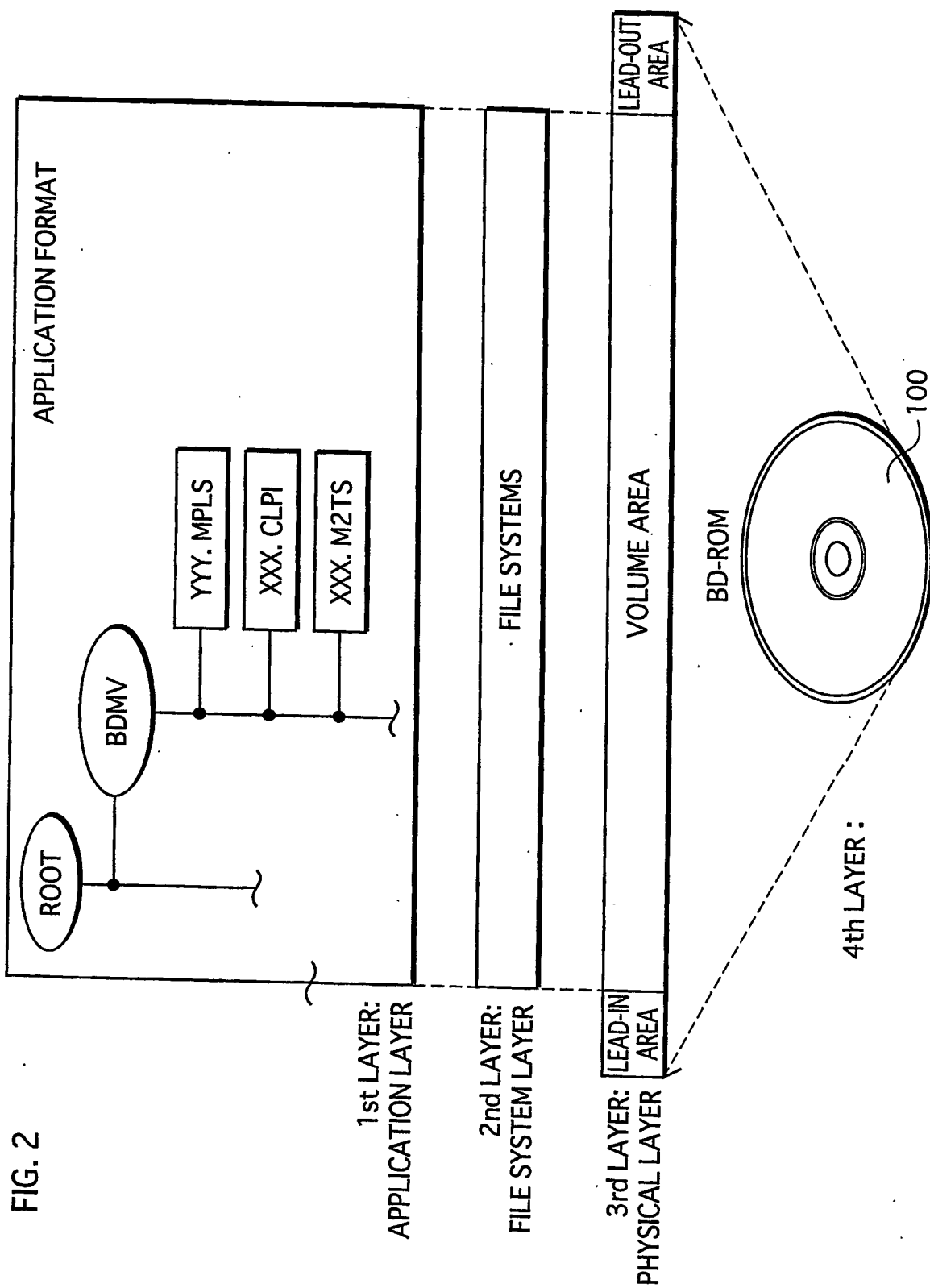


FIG. 1





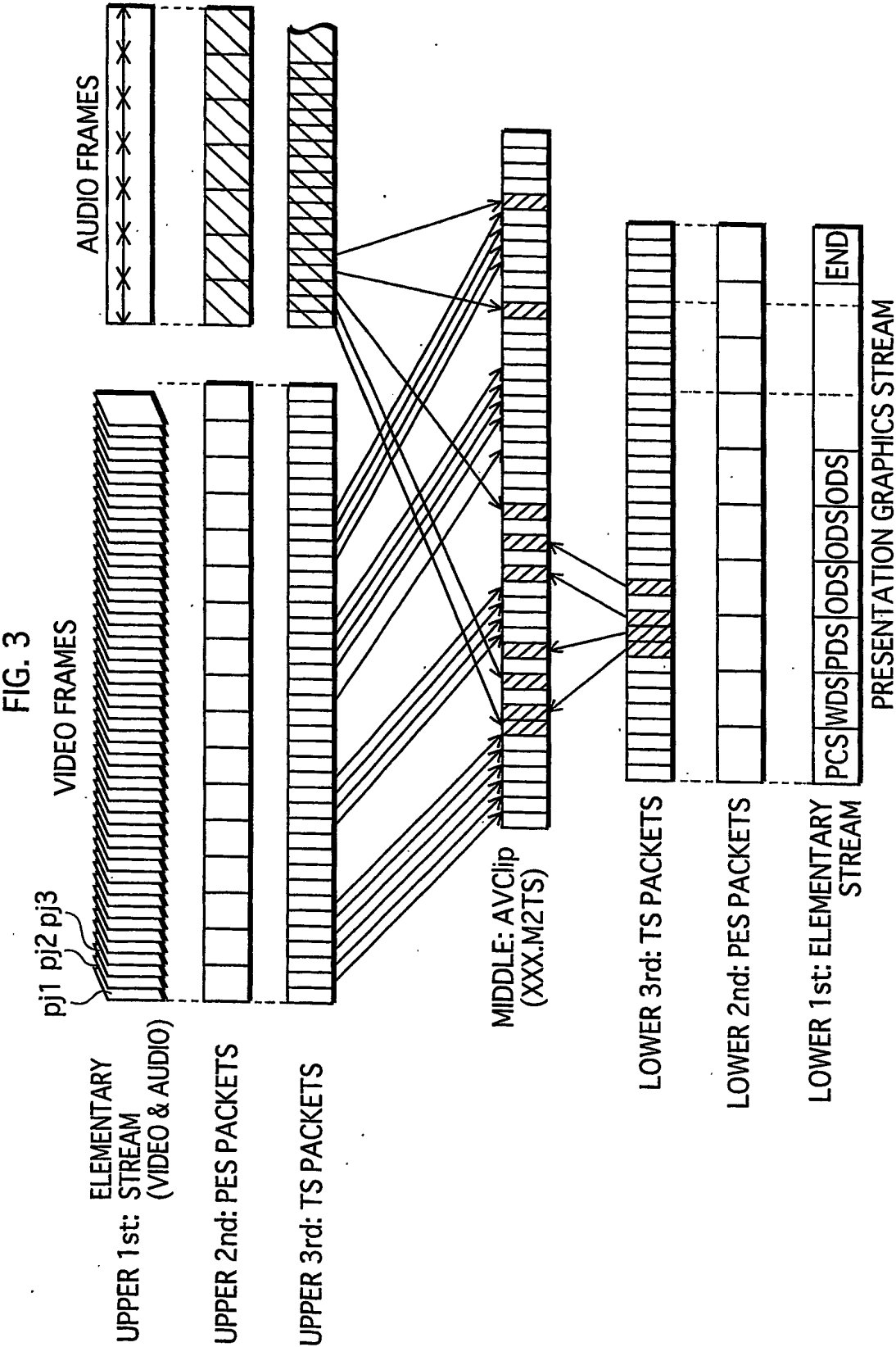
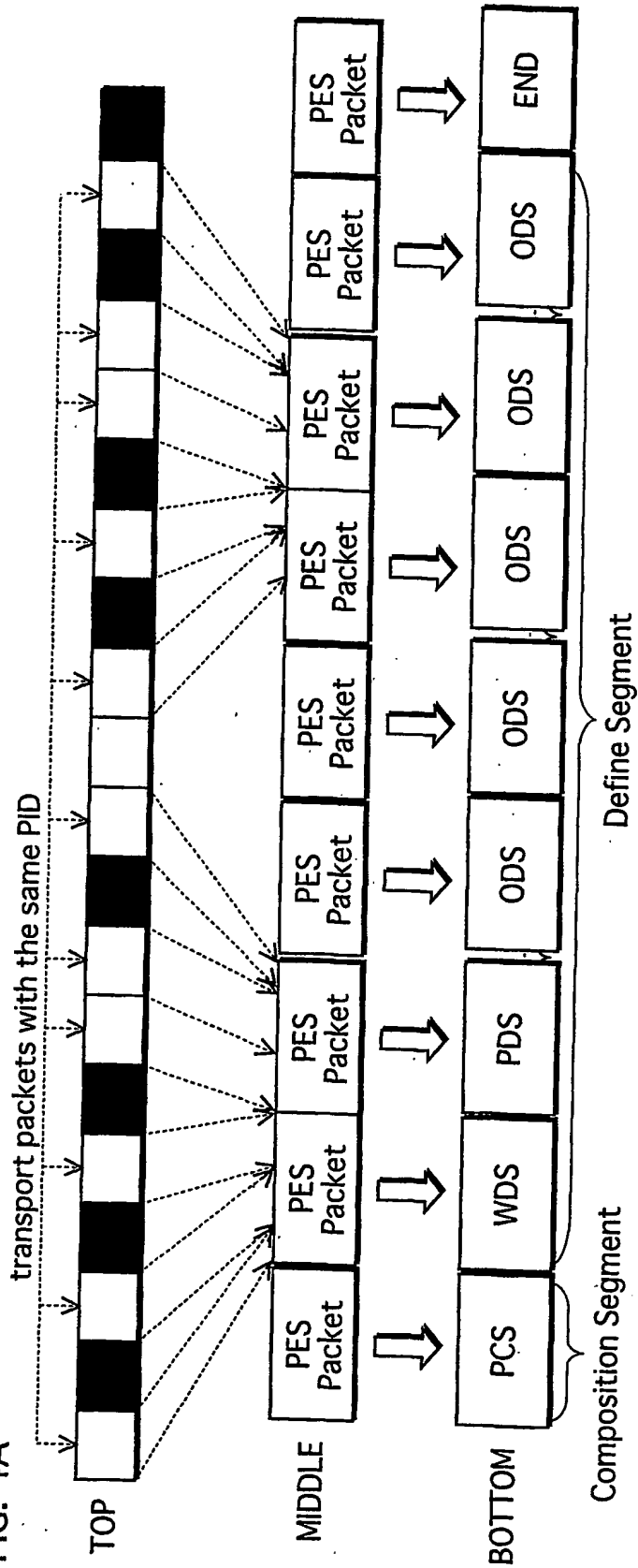


FIG. 4A



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FIG. 4B

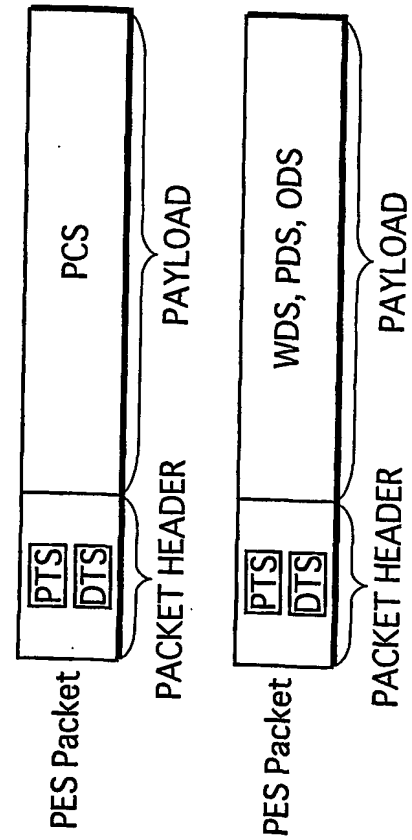


FIG. 5

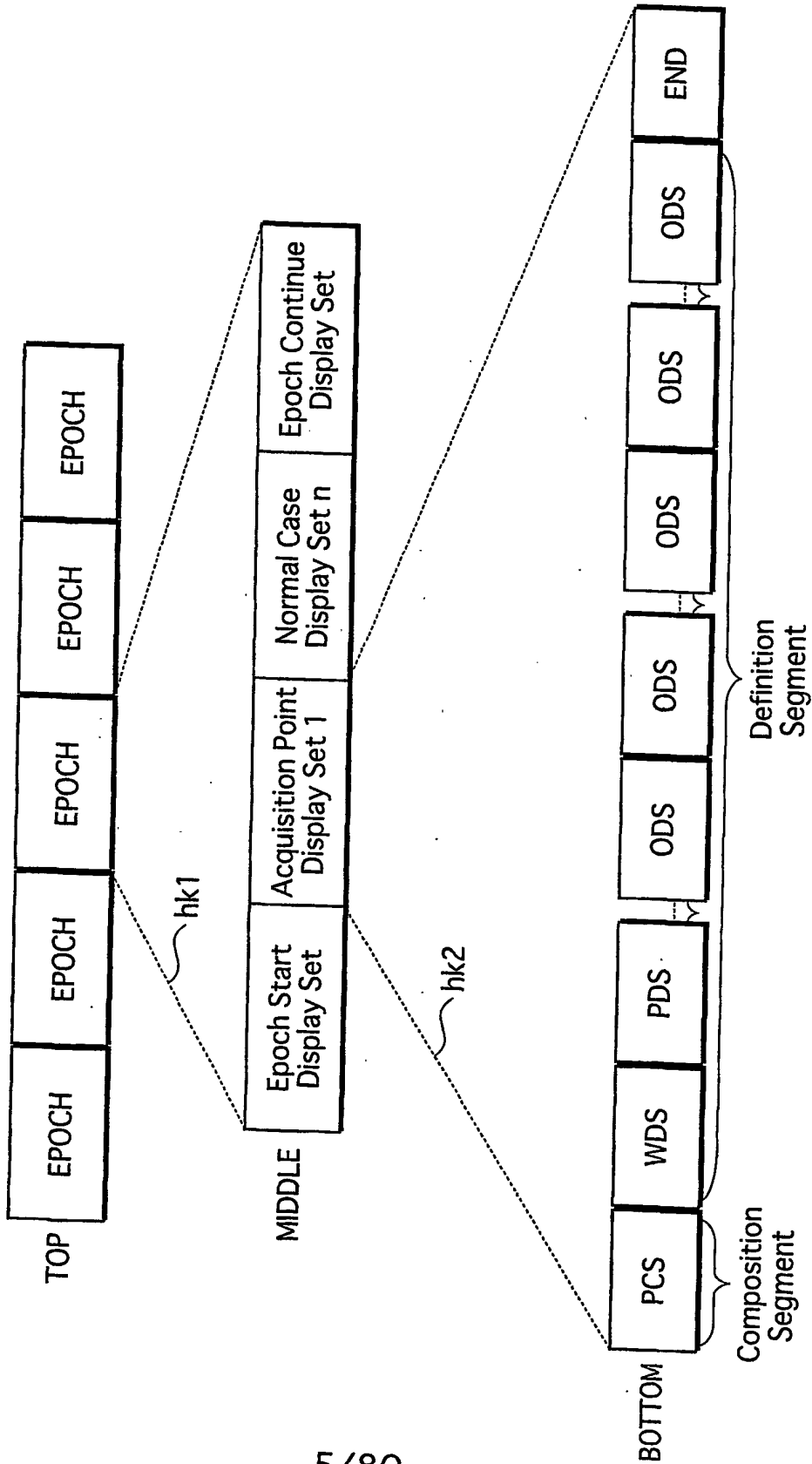


FIG. 6

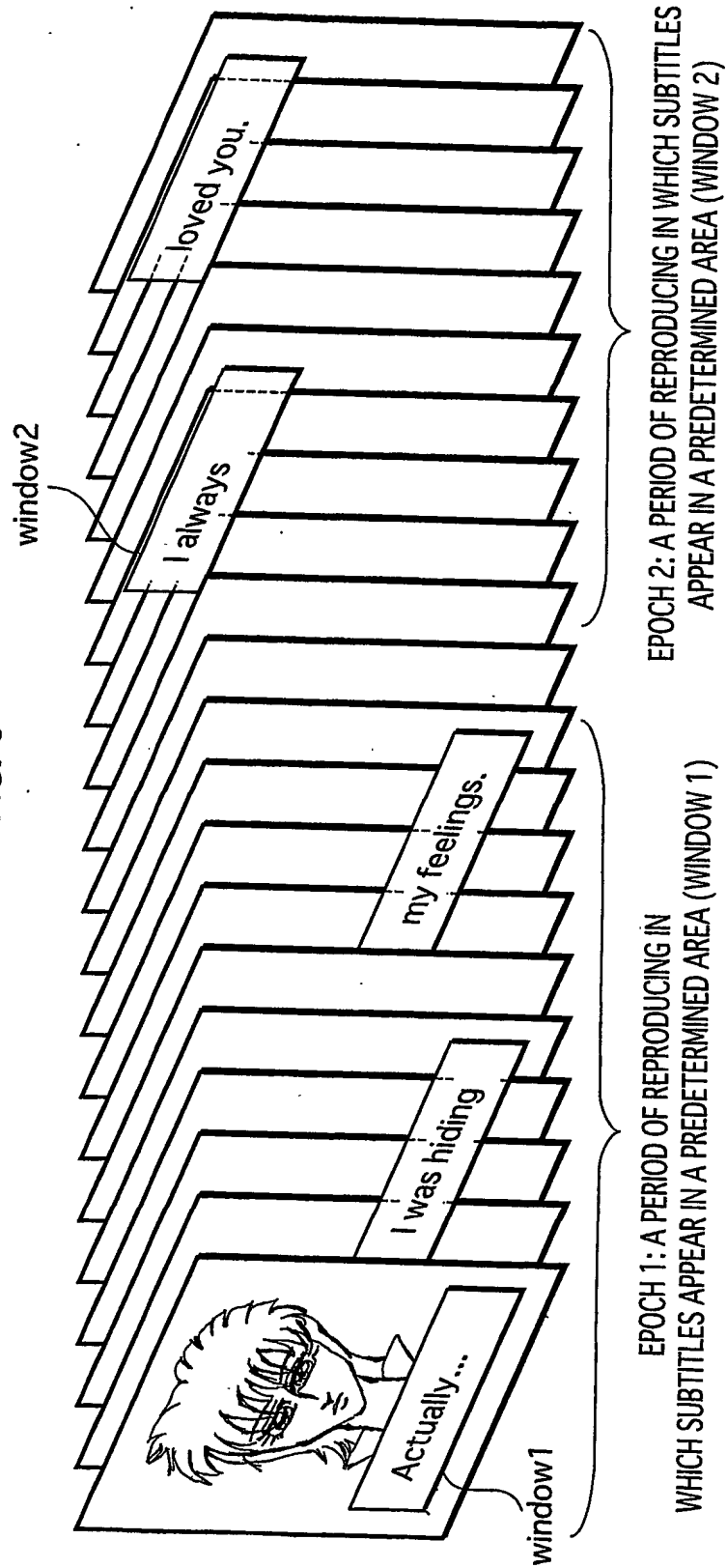


FIG. 7A

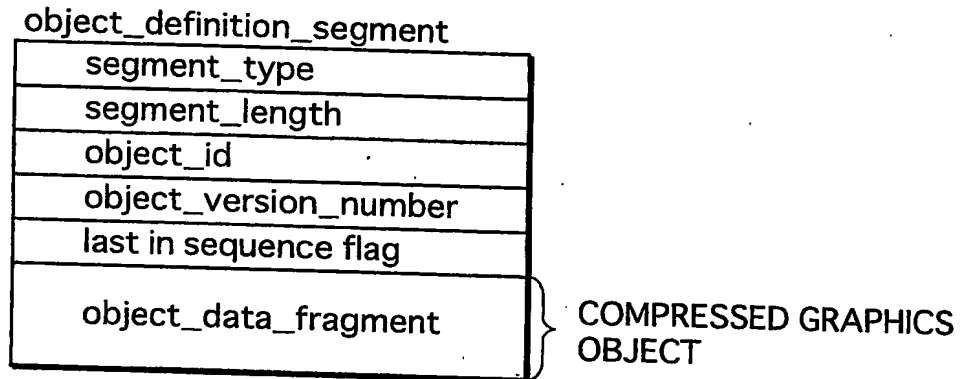


FIG. 7B

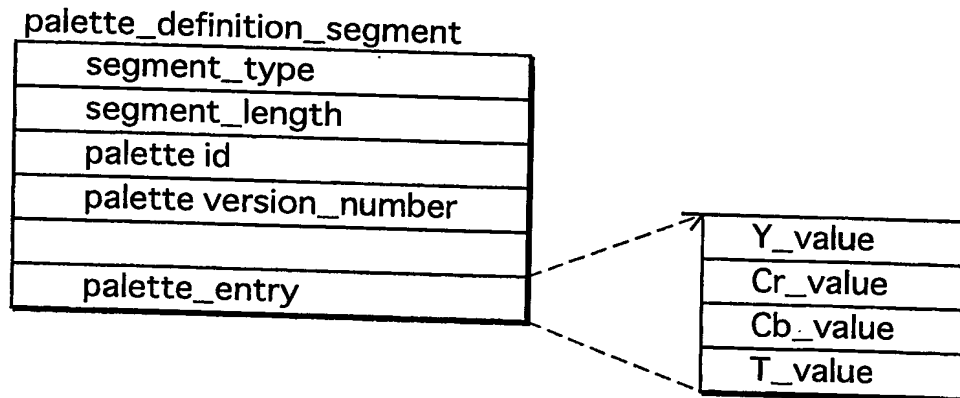


FIG. 8A

window_definition_segment

window_id
window_horizontal_position
window_vertical_position
window_width
window_height

FIG. 8B

presentation_composition_segment

segment_type
segment_length
composition_number
composition_state
palette_update_flag
palette_id
window_information(1)
window_information(2)
:
window_information(i)
:
window_information(m)

wd1

object_id
window_id
object_cropped_flag
object_horizontal_position
object_vertical_position
cropping_rectangle_information(1)
cropping_rectangle_information(2)
:
cropping_rectangle_information(i)
:
cropping_rectangle_information(n)

wd2

object_cropping_horizontal_position
object_cropping_vertical_position
object_cropping_width
object_cropping_height

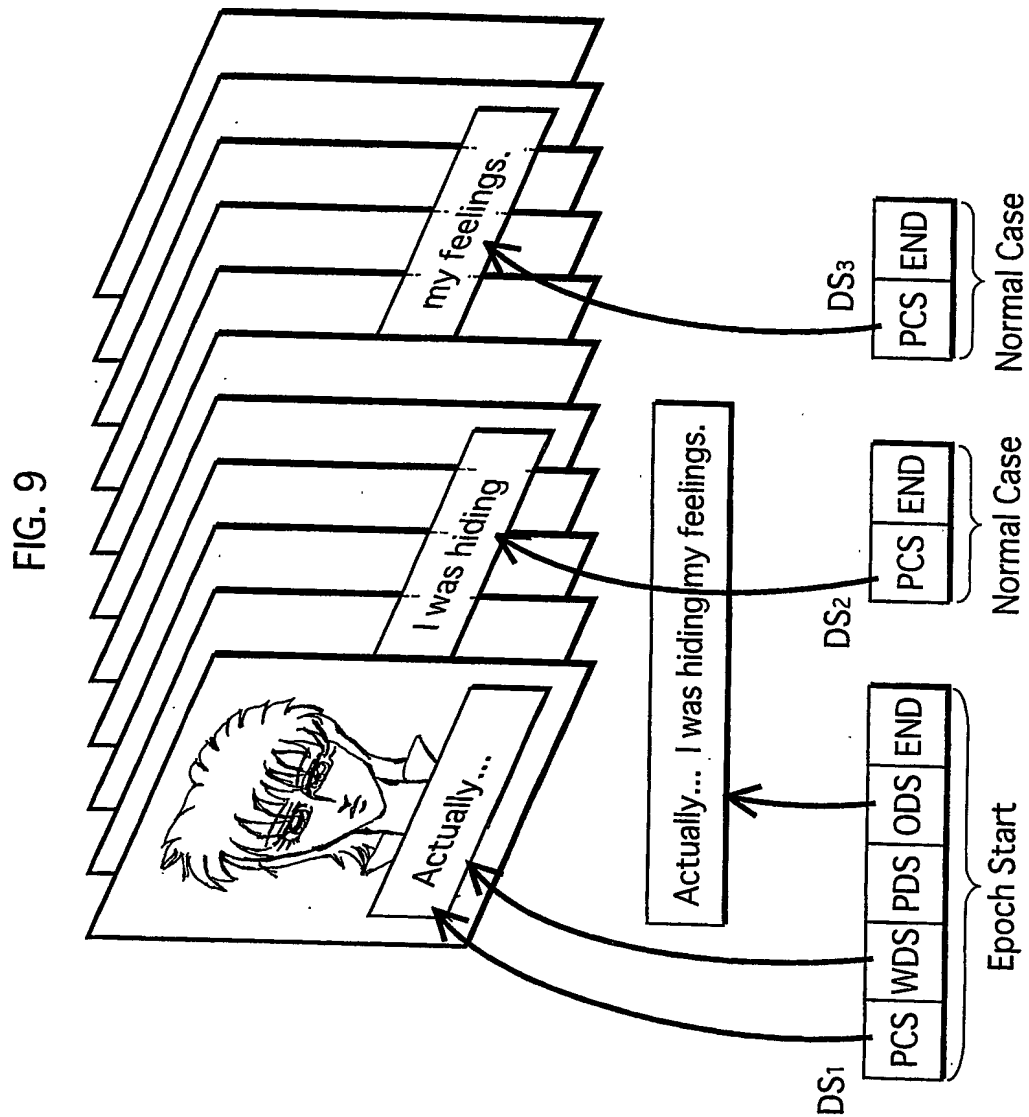


FIG. 10

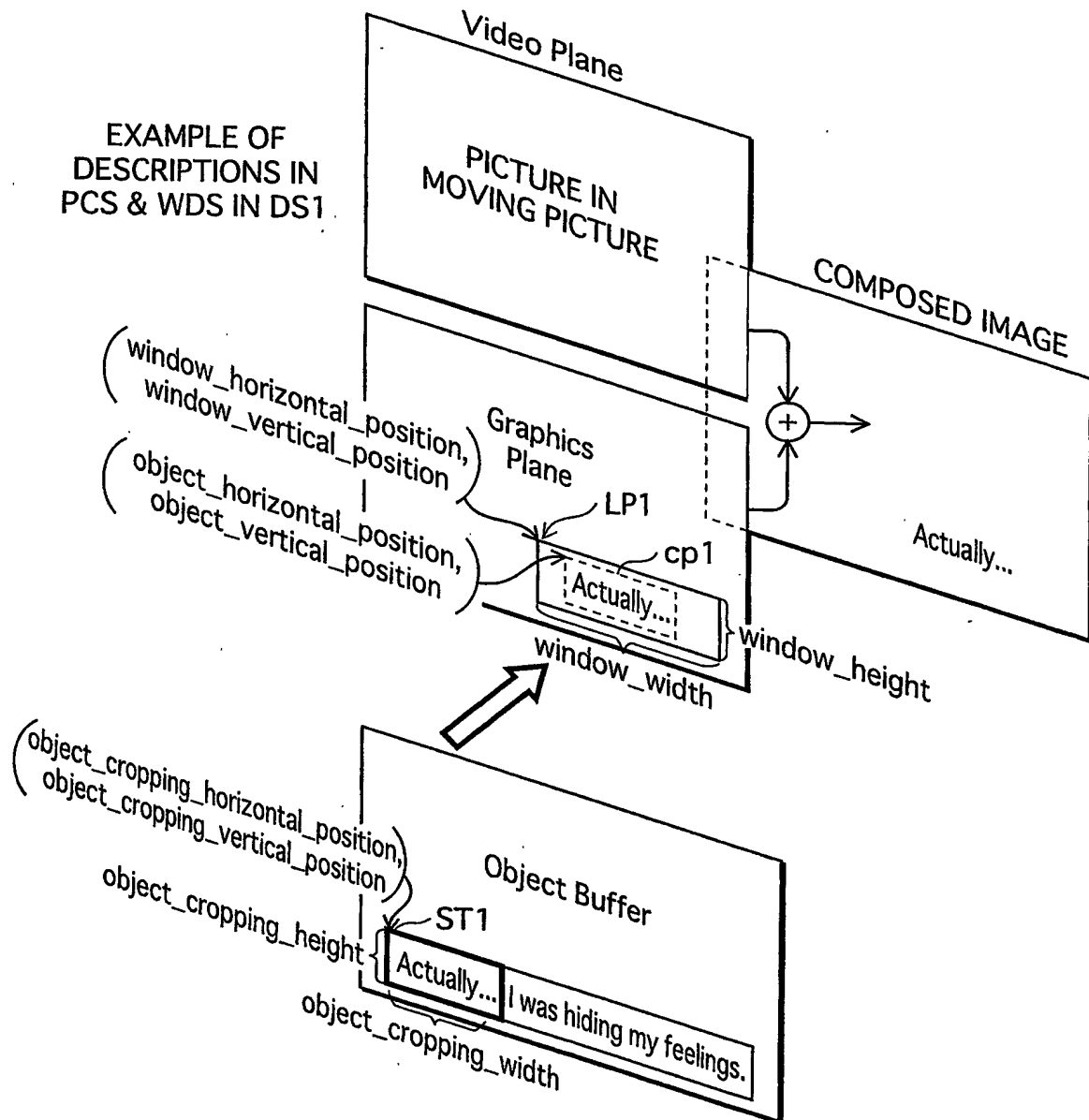


FIG. 11

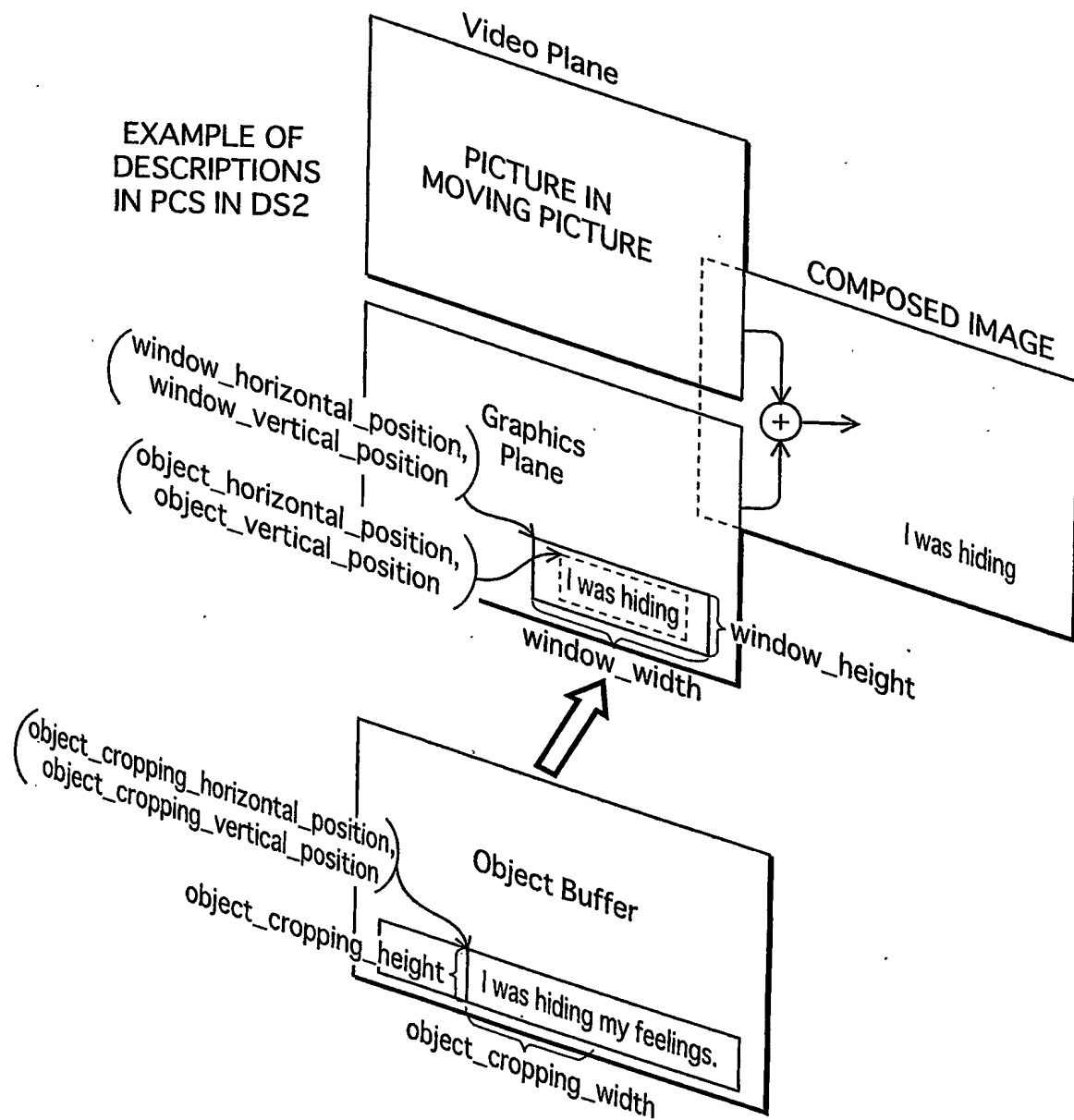
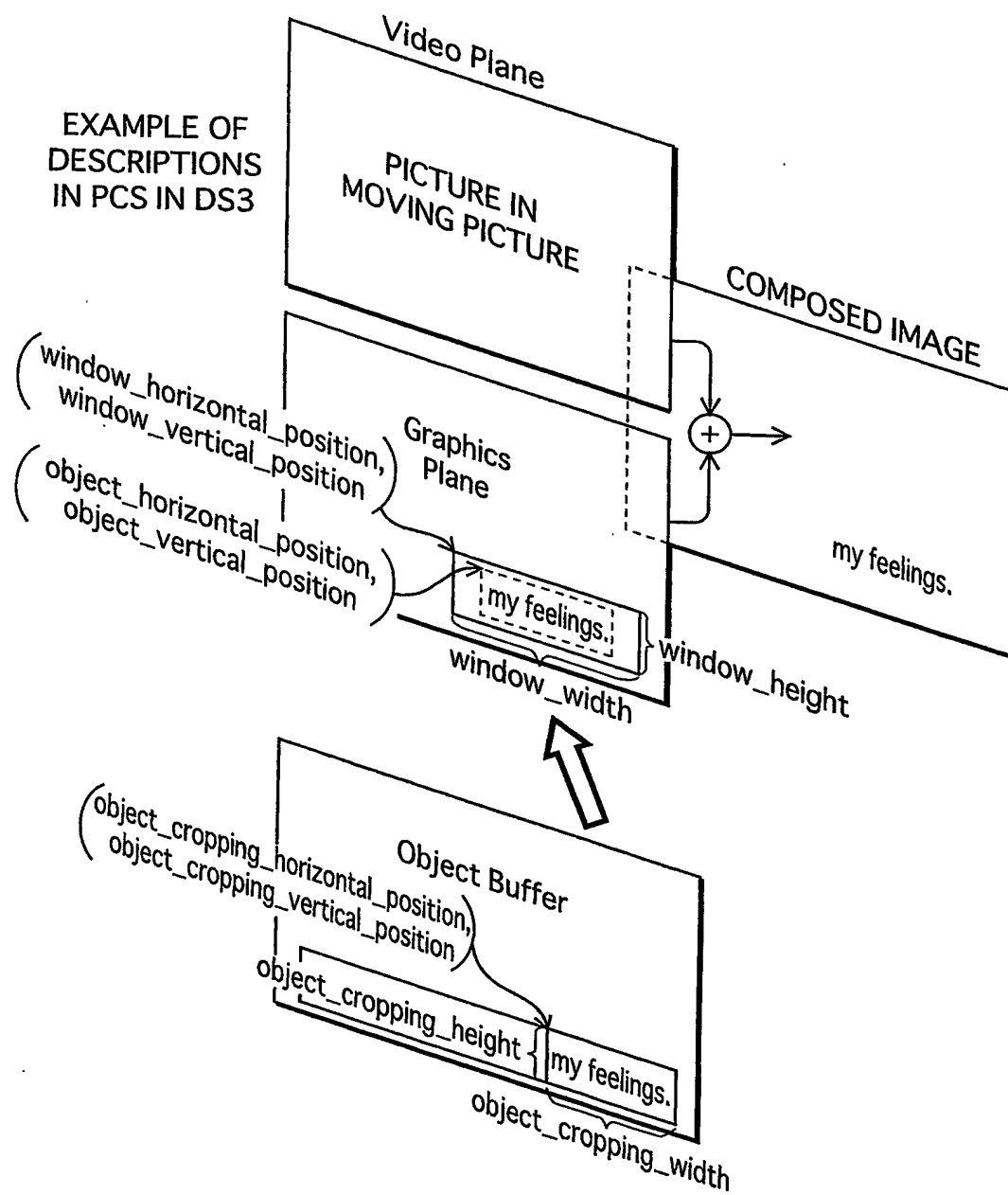


FIG. 12



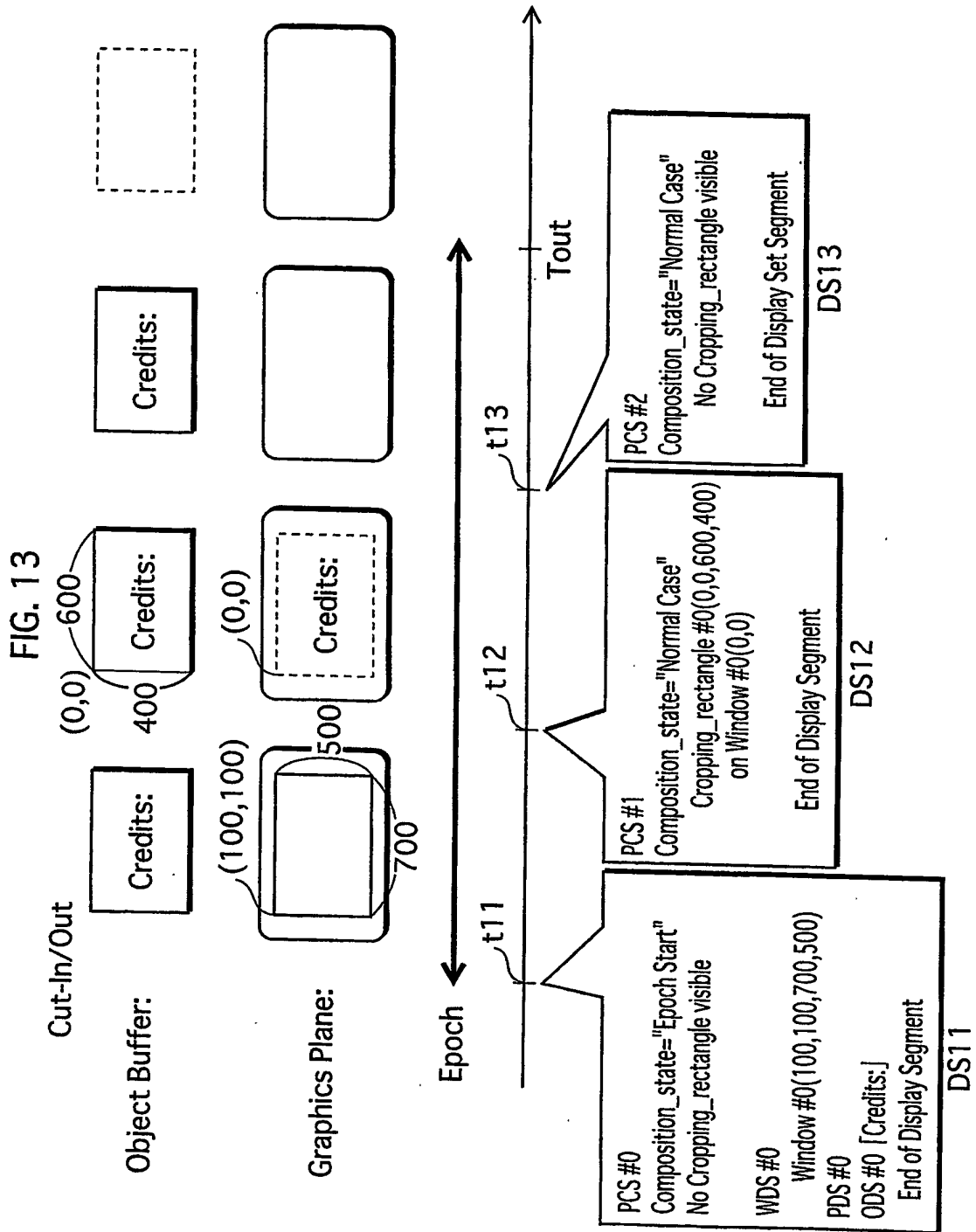


FIG. 15

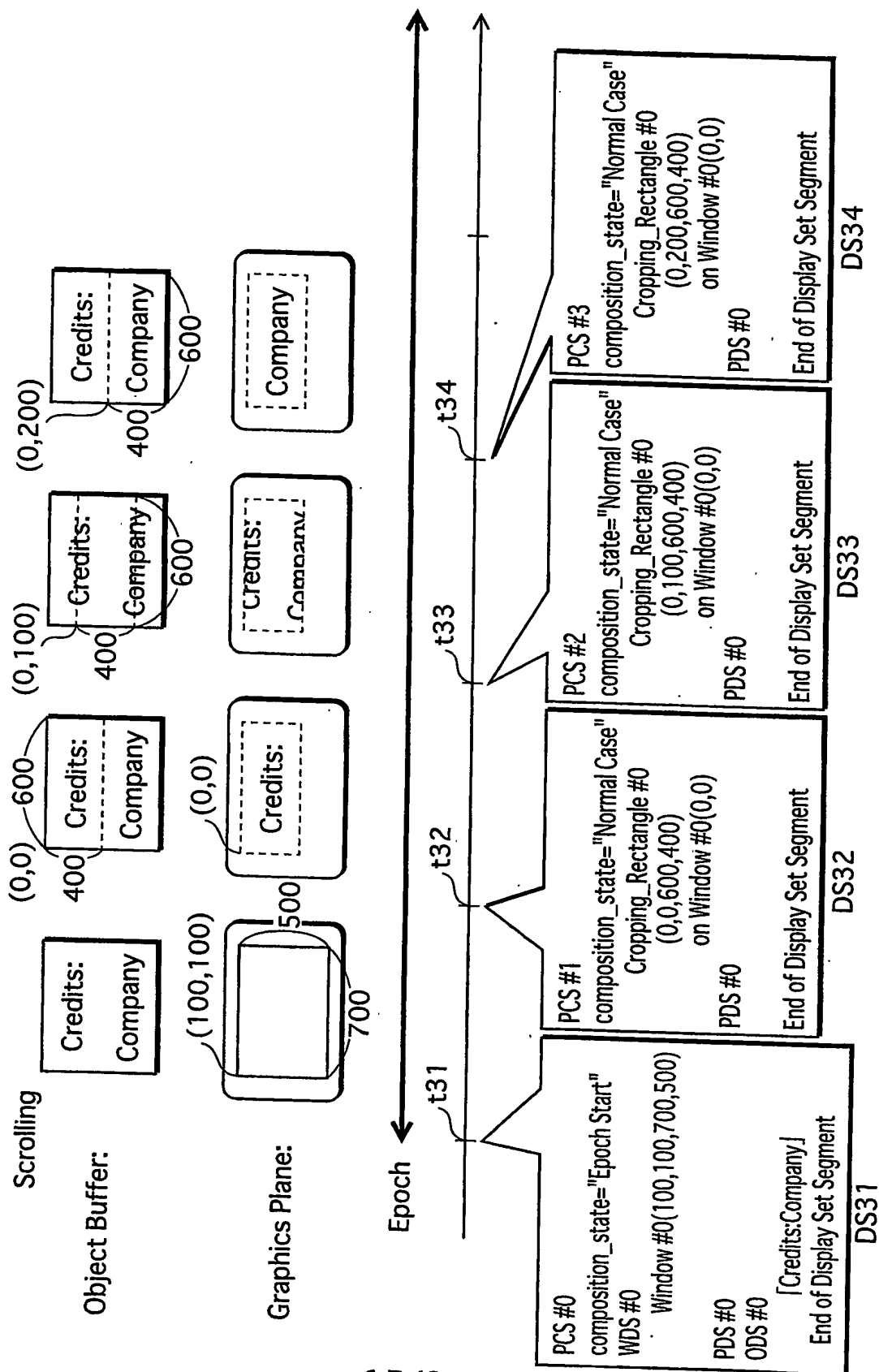


FIG. 16

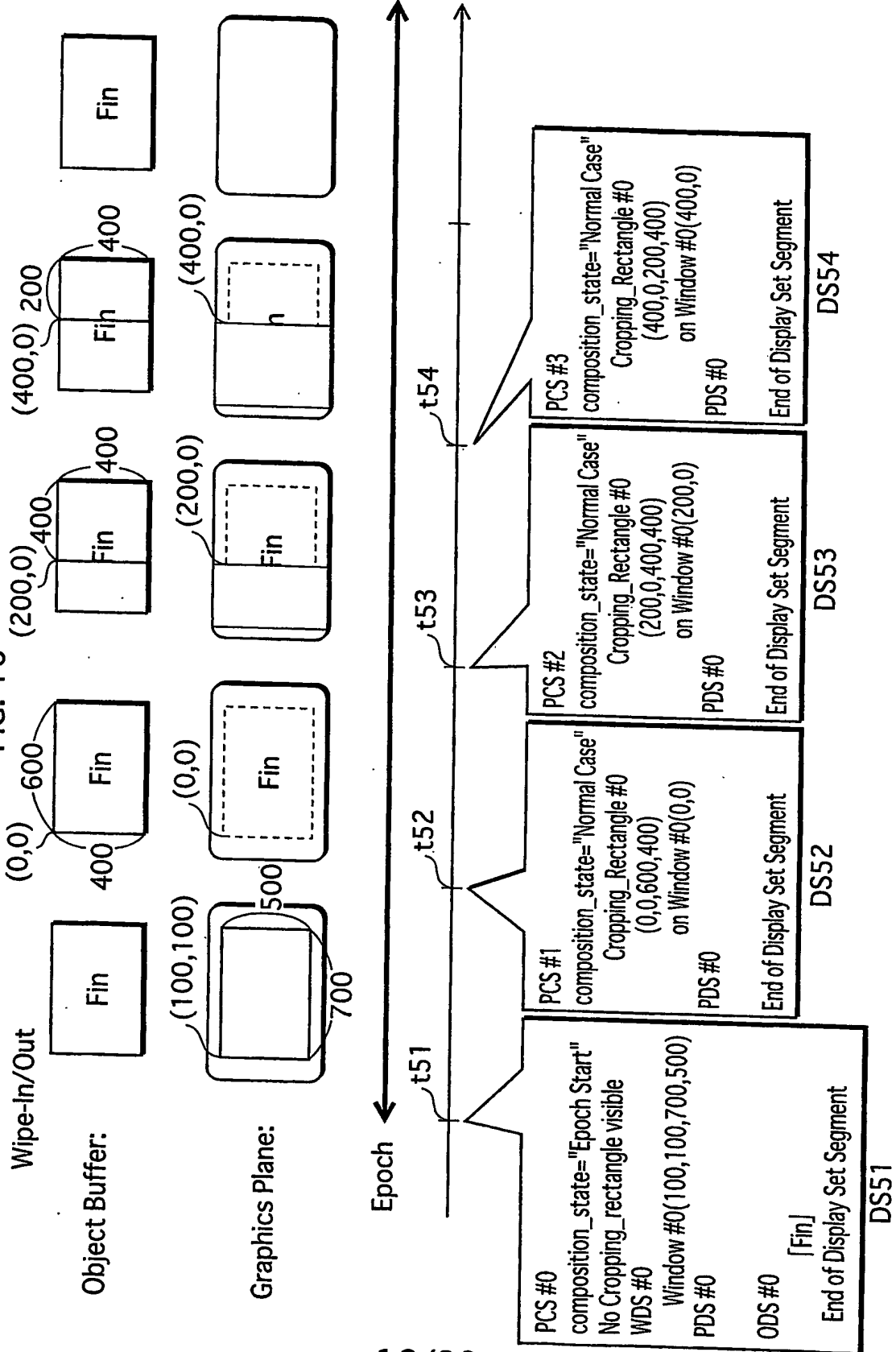


FIG. 17

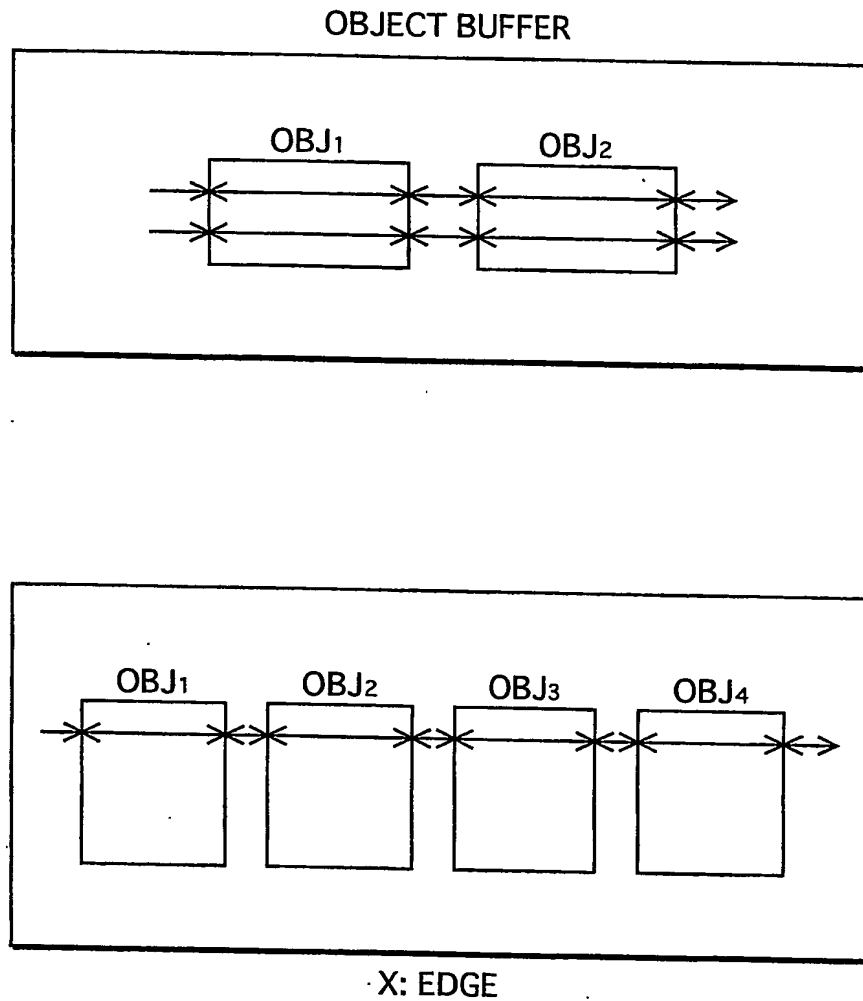


FIG. 18

PTS(DS_n[PCS]) >= DTS(DS_n[PCS]) + DECODEDURATION(DS_n)

Where:

- DECODEDURATION(DS_n) is calculated as follows:

```

decode_duration = 0 ;
decode_duration += PLANEINITIALIZATIONTIME( DSn ) ;
if( DSn. PCS. num_of_objects == 2 )
{
    decode_duration += WAIT( DSn, DSn. PCS. OBJ[0], decode_duration ) ;
    if( DSn. PCS. OBJ[0]. window_id == DSn. PCS. OBJ[1]. window_id )
    {
        decode_duration += WAIT( DSn, DSn. PCS. OBJ[1], decode_duration ) ;
        decode_duration += 90000*( SIZE( DSn. PCS. OBJ[0]. window_id )//256*106 ) ;
    }
    else
    {
        decode_duration += 90000*( SIZE( DSn. PCS. OBJ[0]. window_id )//256*106 ) ;
        decode_duration += WAIT( DSn, DSn. PCS. OBJ[1], decode_duration ) ;
        decode_duration += 90000*( SIZE( DSn. PCS. OBJ[1]. window_id )//256*106 ) ;
    }
}
else if( DSn. PCS. num_of_objects == 1 )
{
    decode_duration += WAIT( DSn, DSn. PCS. OBJ[0], decode_duration ) ;
    decode_duration += 90000*( SIZE( DSn. PCS. OBJ[0]. window_id )//256*106 ) ;
}
return decode_duration ;

```
- PLANEINITIALIZATIONTIME(DS_n) is calculated as follows:

```

initialize_duration=0 ;
if( DSn. PCS. composition_state == EPOCH_START )
{
    initialize_duration = 90000*( 8*video_width*video_height//256*106 ) ;
}
else
{
    for( i=0 ; i < WDS. num_windows ; i++ )
    {
        if( EMPTY( DSn. WDS. WIN[i], DSn ) )
            initialize_duration += 90000*( SIZE( DSn. WDS. WIN[i] )//256*106 ) ;
    }
}
return initialize_duration ;

```
- WAIT(DS_n, OBJ, current_duration) is calculated as follows:

```

wait_duration = 0 ;
if( EXISTS( OBJ. object_id, DSn ) )
{
    object_definition_ready_time = PTS( GET( OBJ. object_id, DSn ) ) ;
    current_time = DTS( DSn. PCS ) + current_duration ;
    if( current_time < object_definition_ready_time )
        wait_duration += object_definition_ready_time - current_time ;
}
return wait_duration ;

```


FIG. 20A

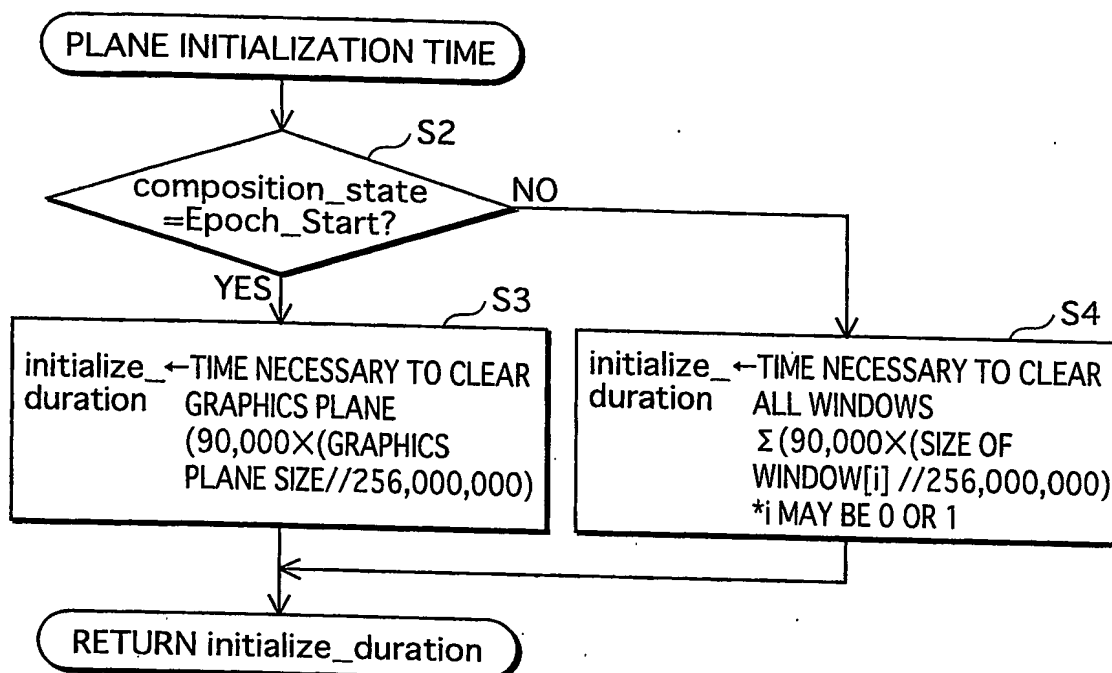


FIG. 20B

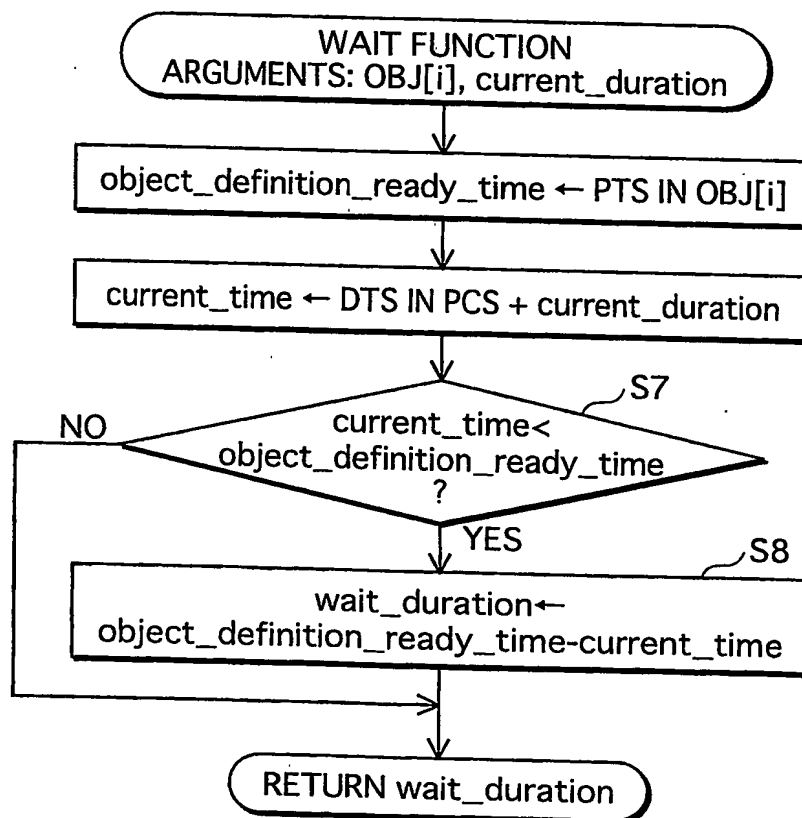


FIG. 21A

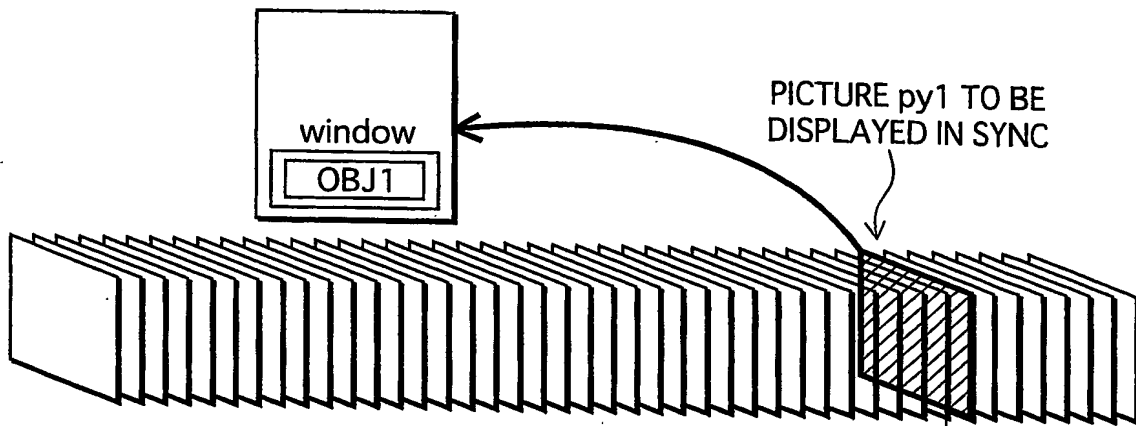


FIG. 21B

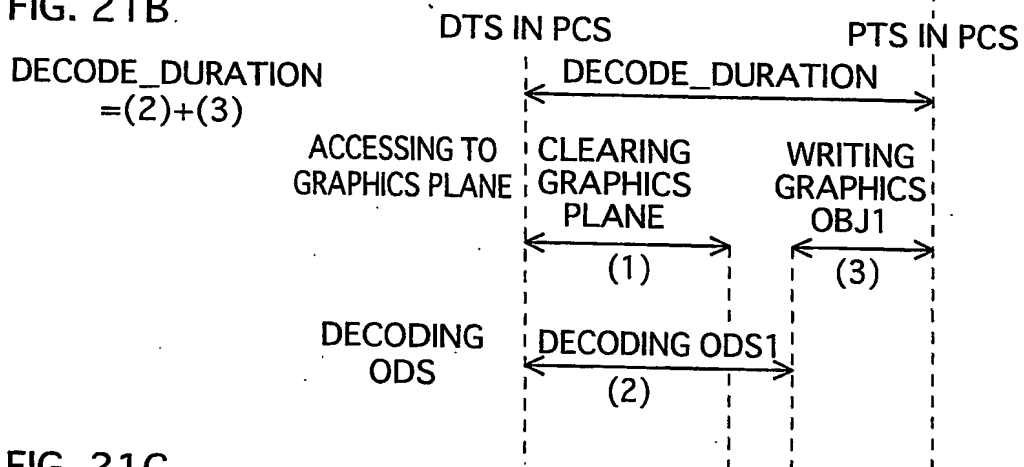


FIG. 21C

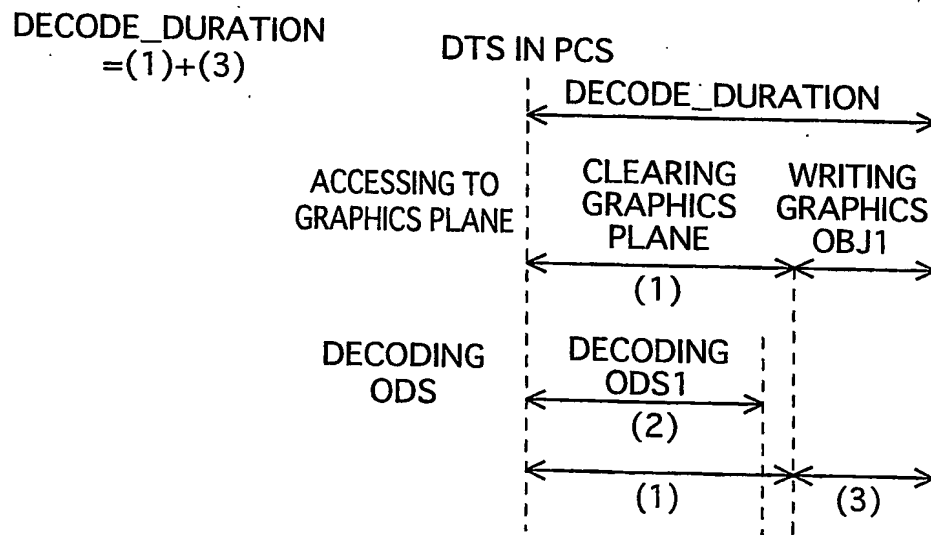


FIG. 22A

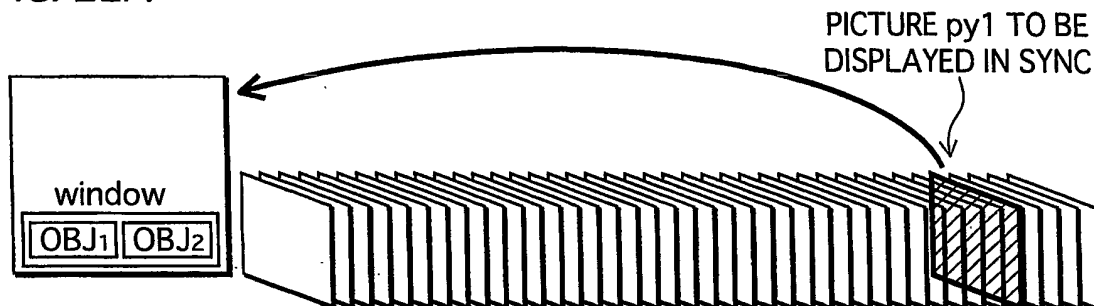


FIG. 22B

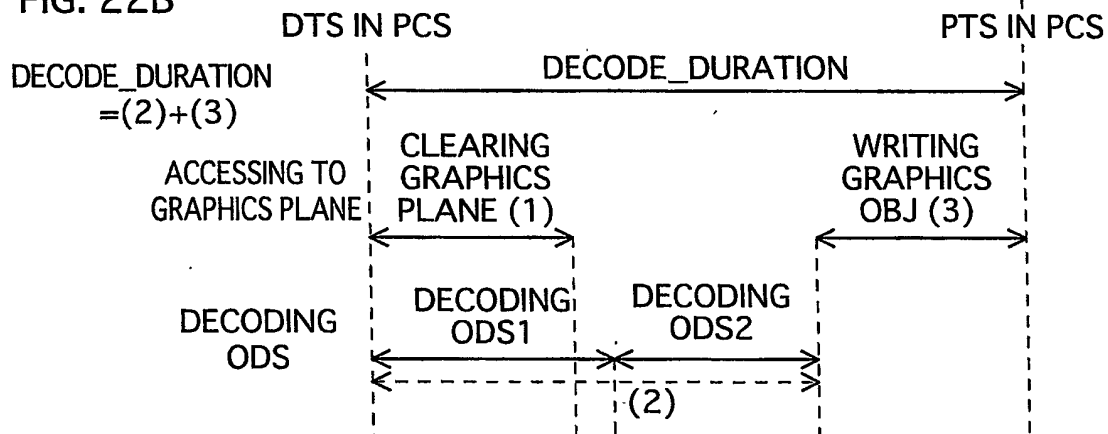
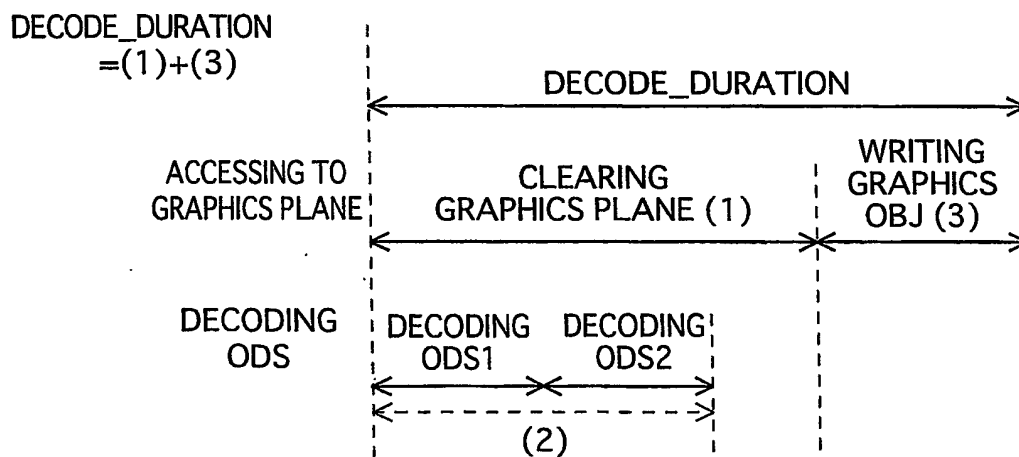


FIG. 22C



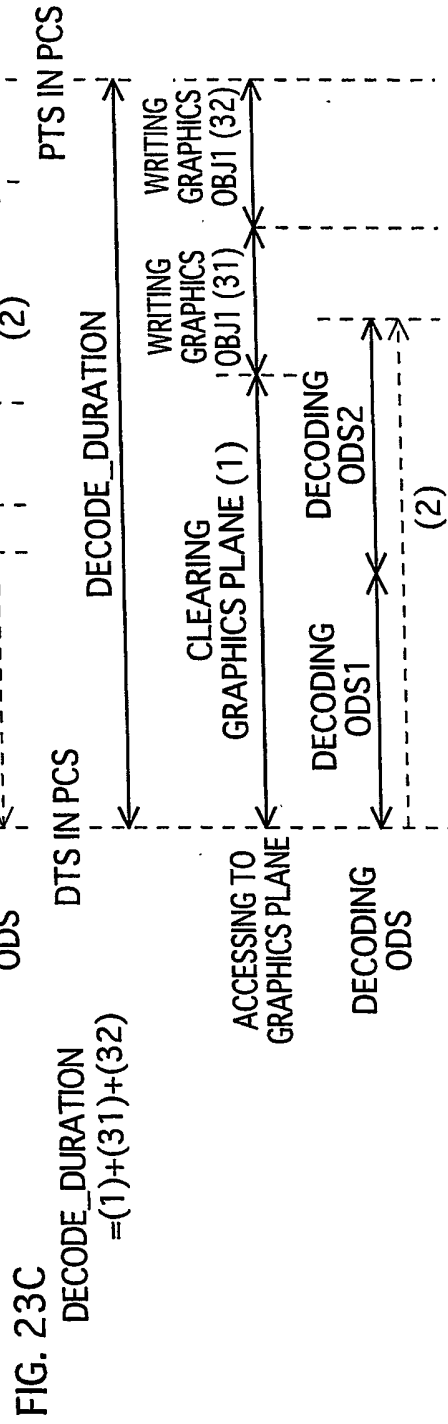
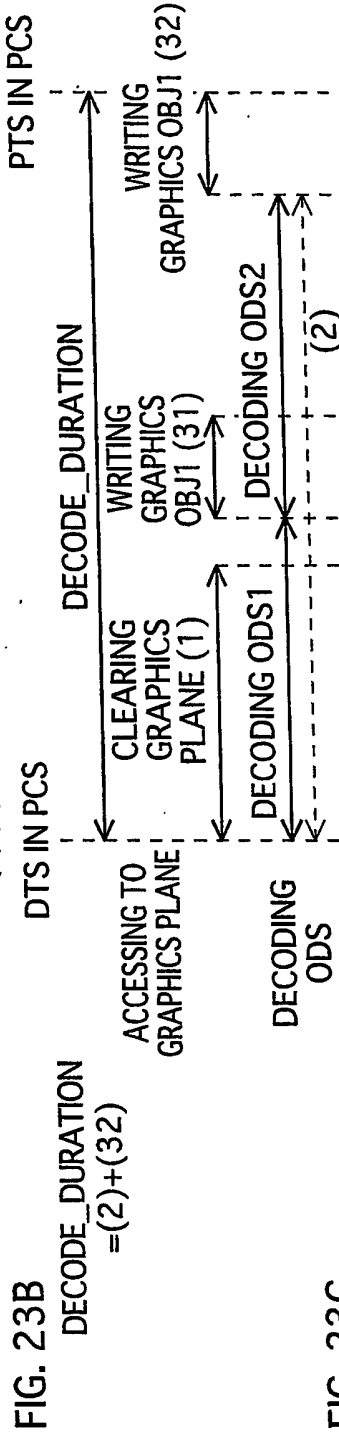
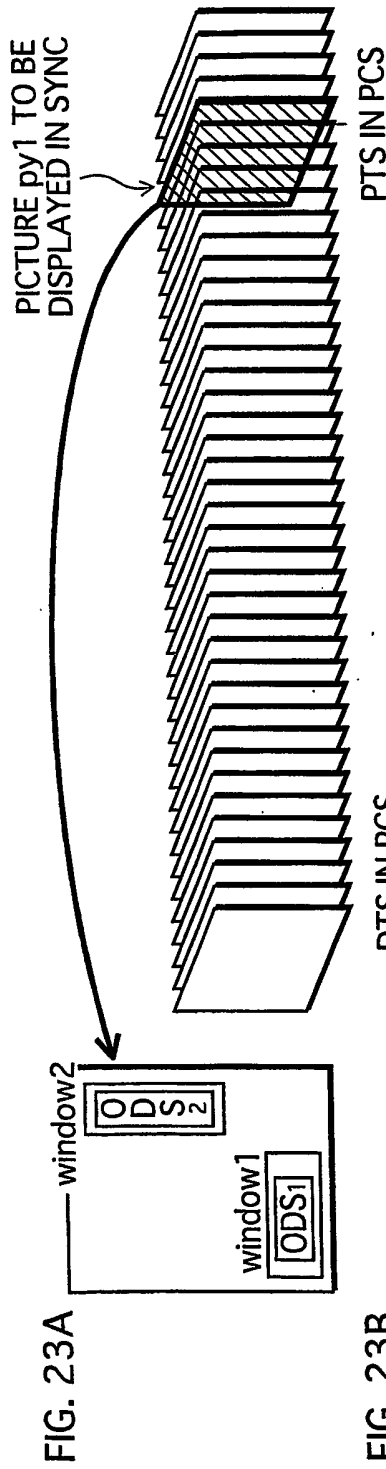


FIG. 24

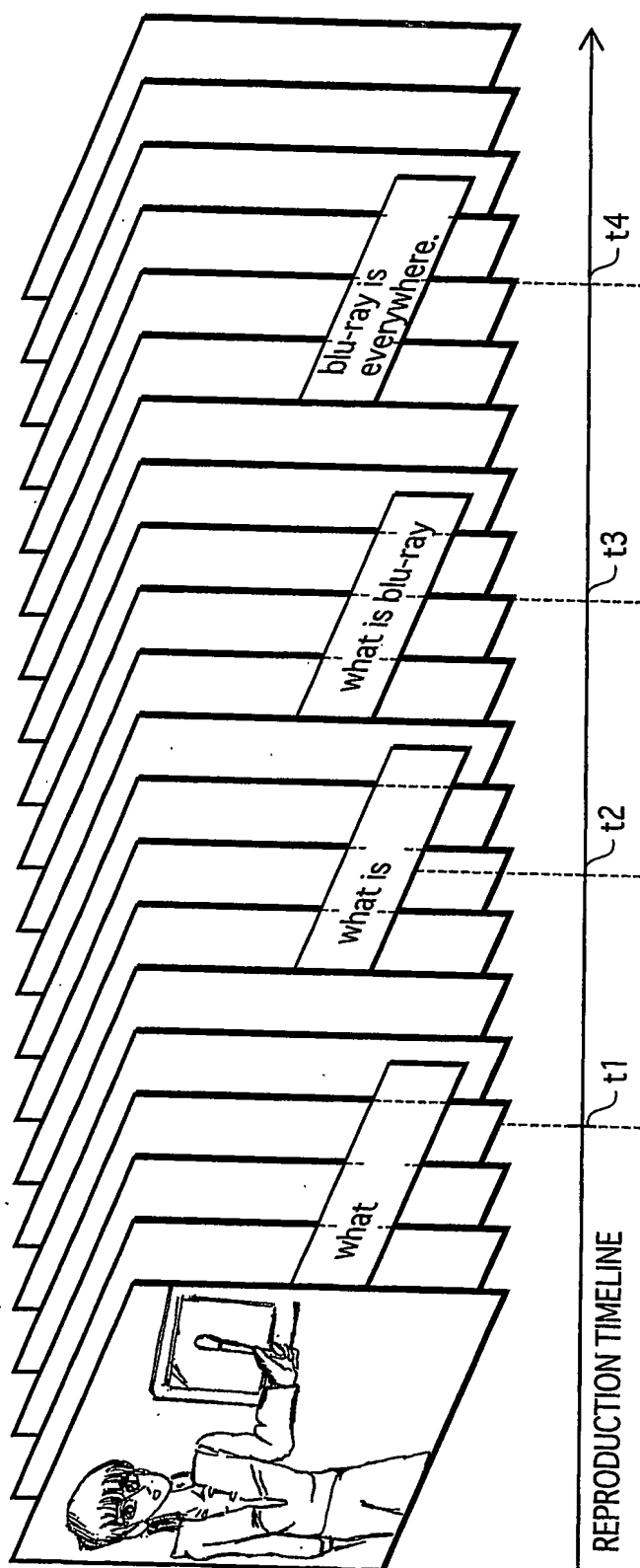


FIG. 25A

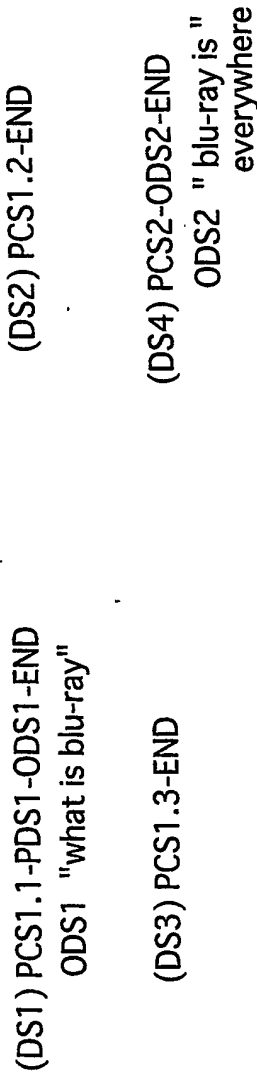


FIG. 25B

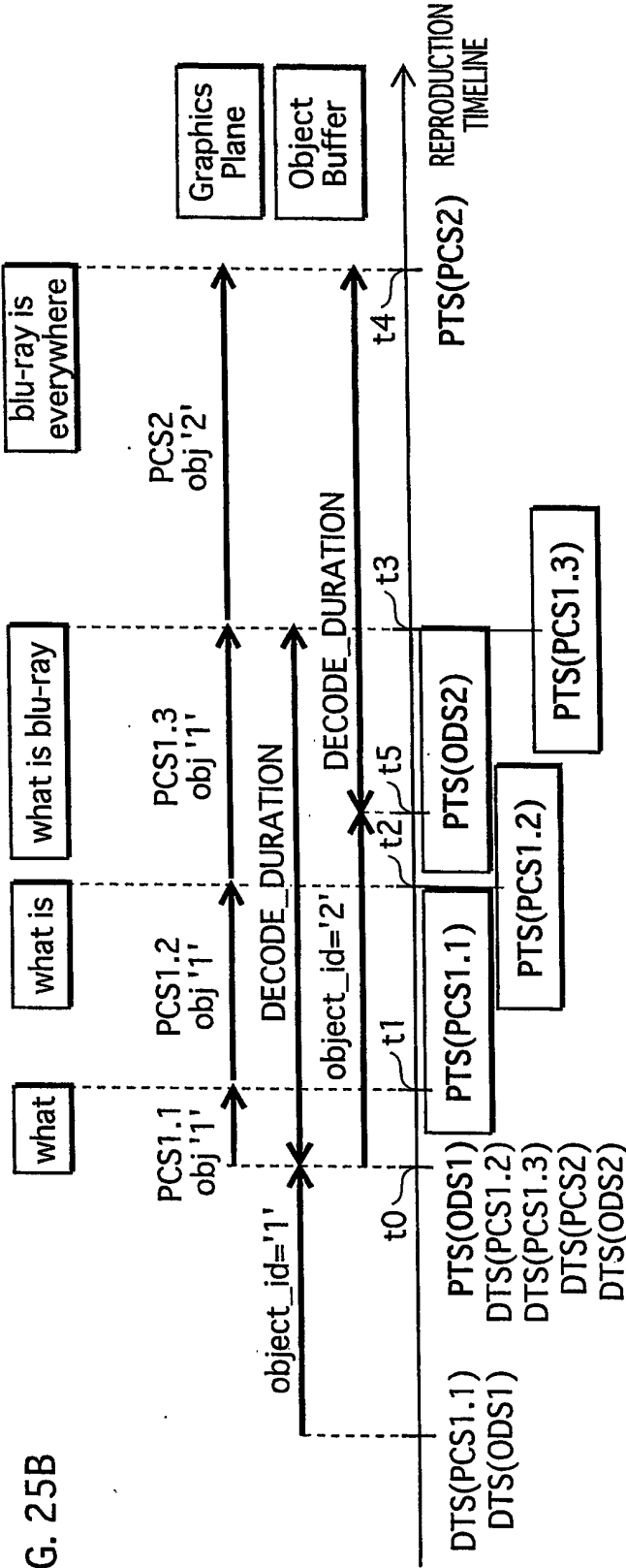


FIG. 26

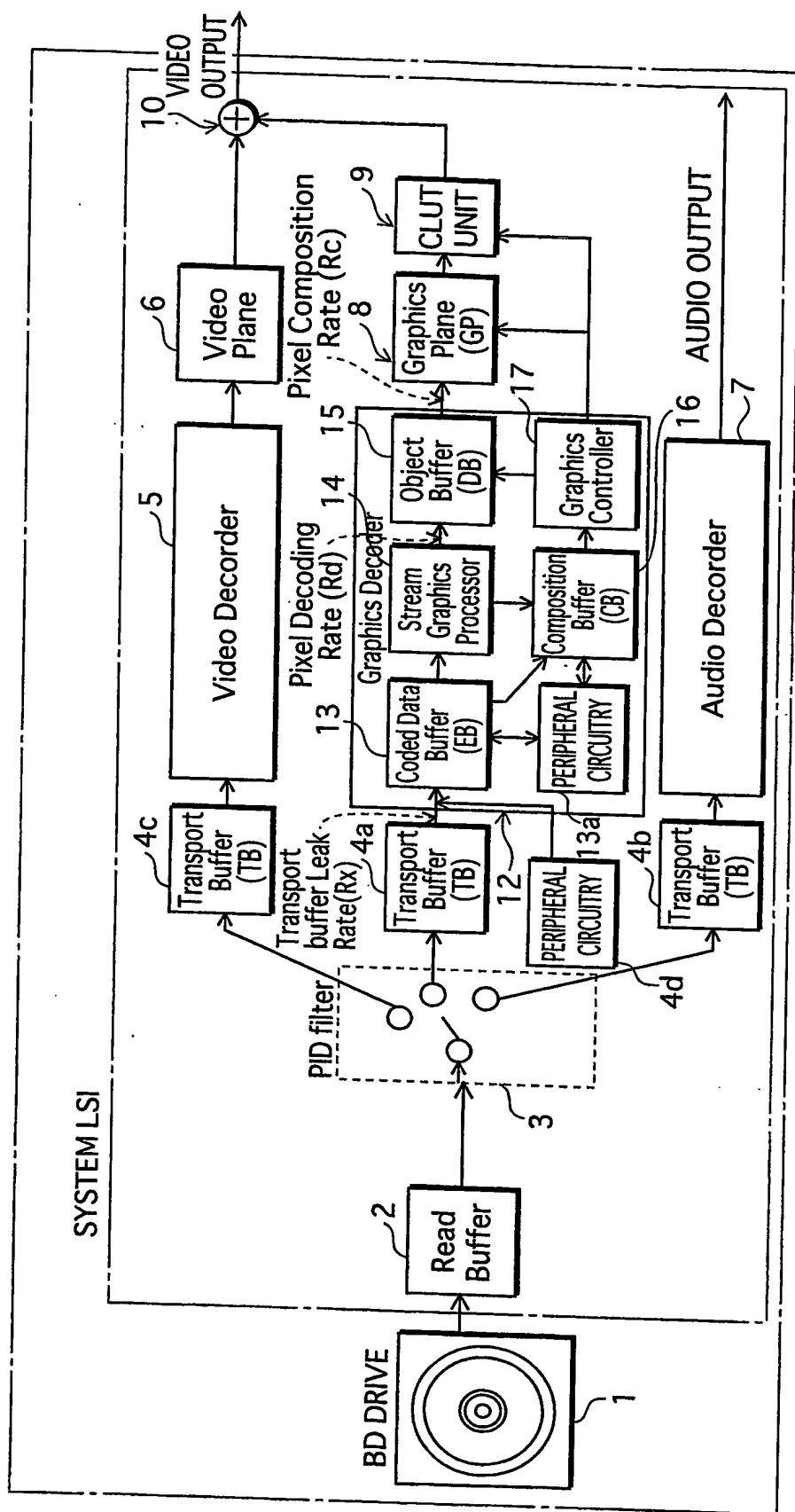
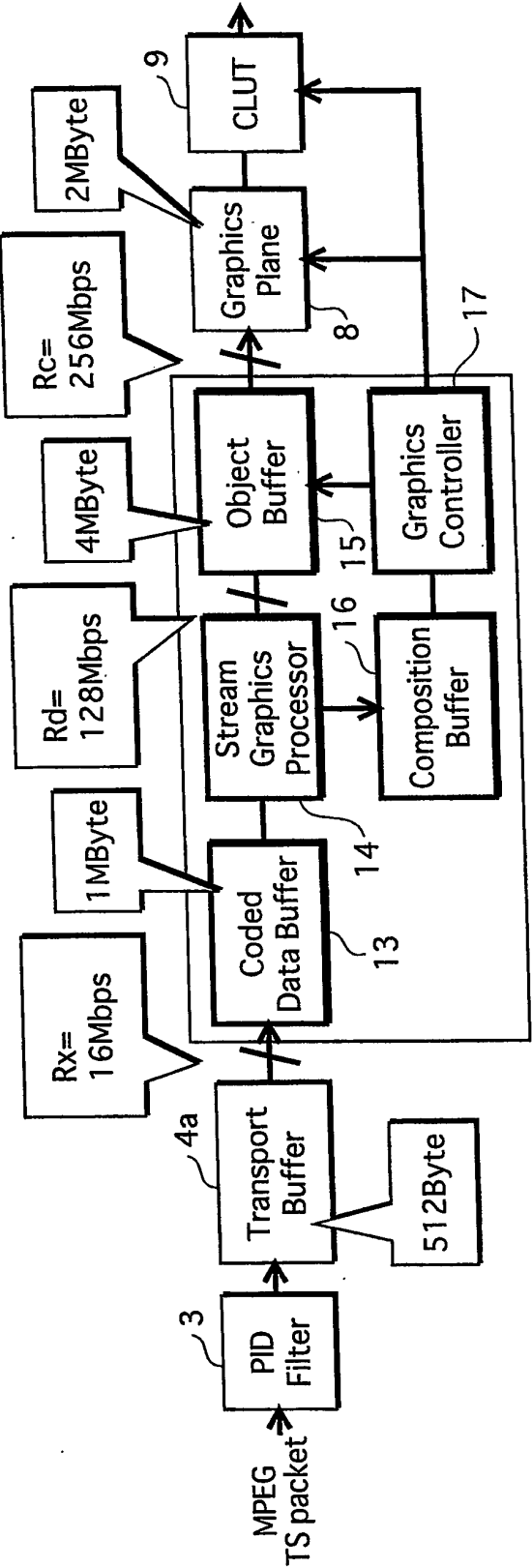
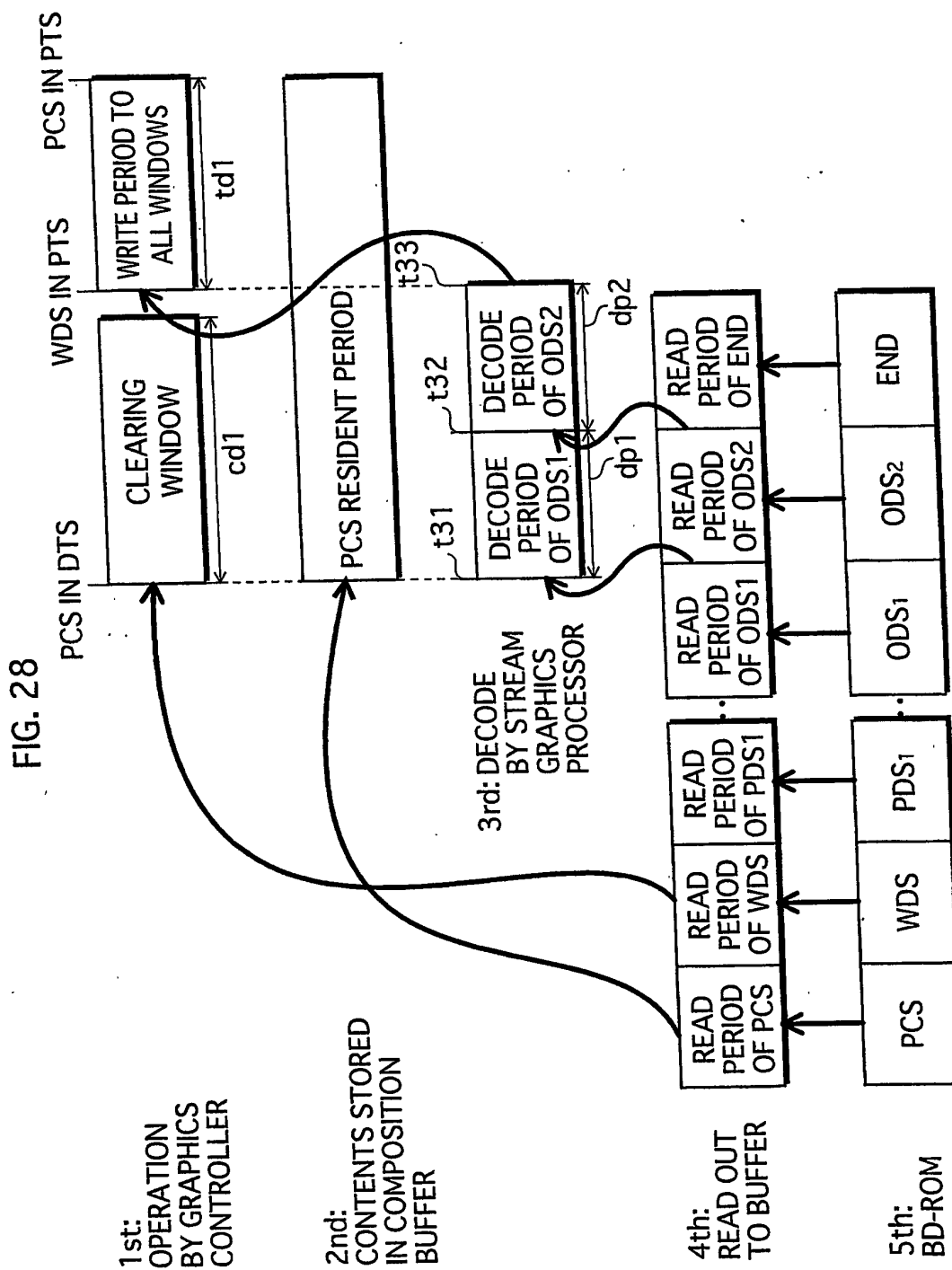


FIG. 27





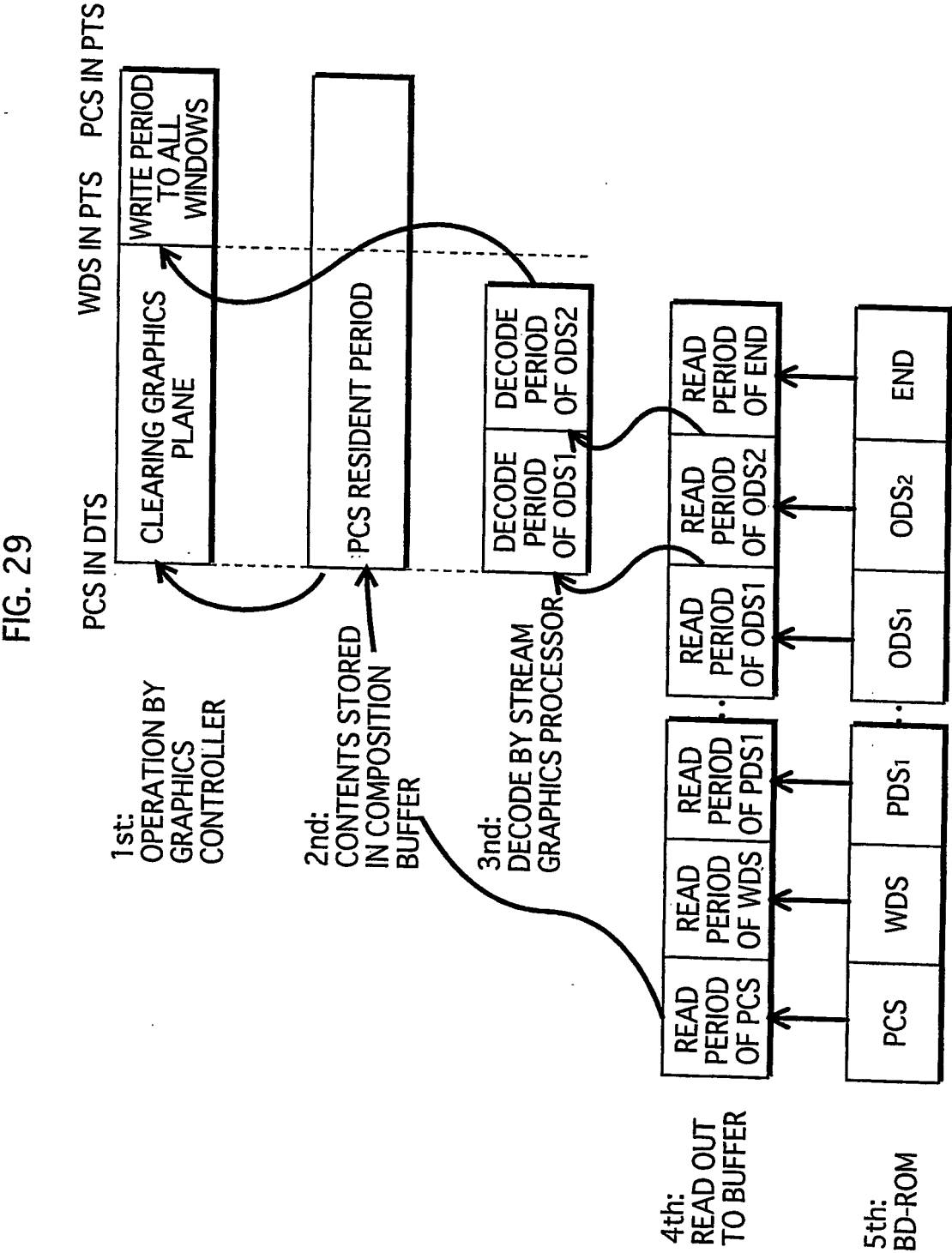


FIG. 30

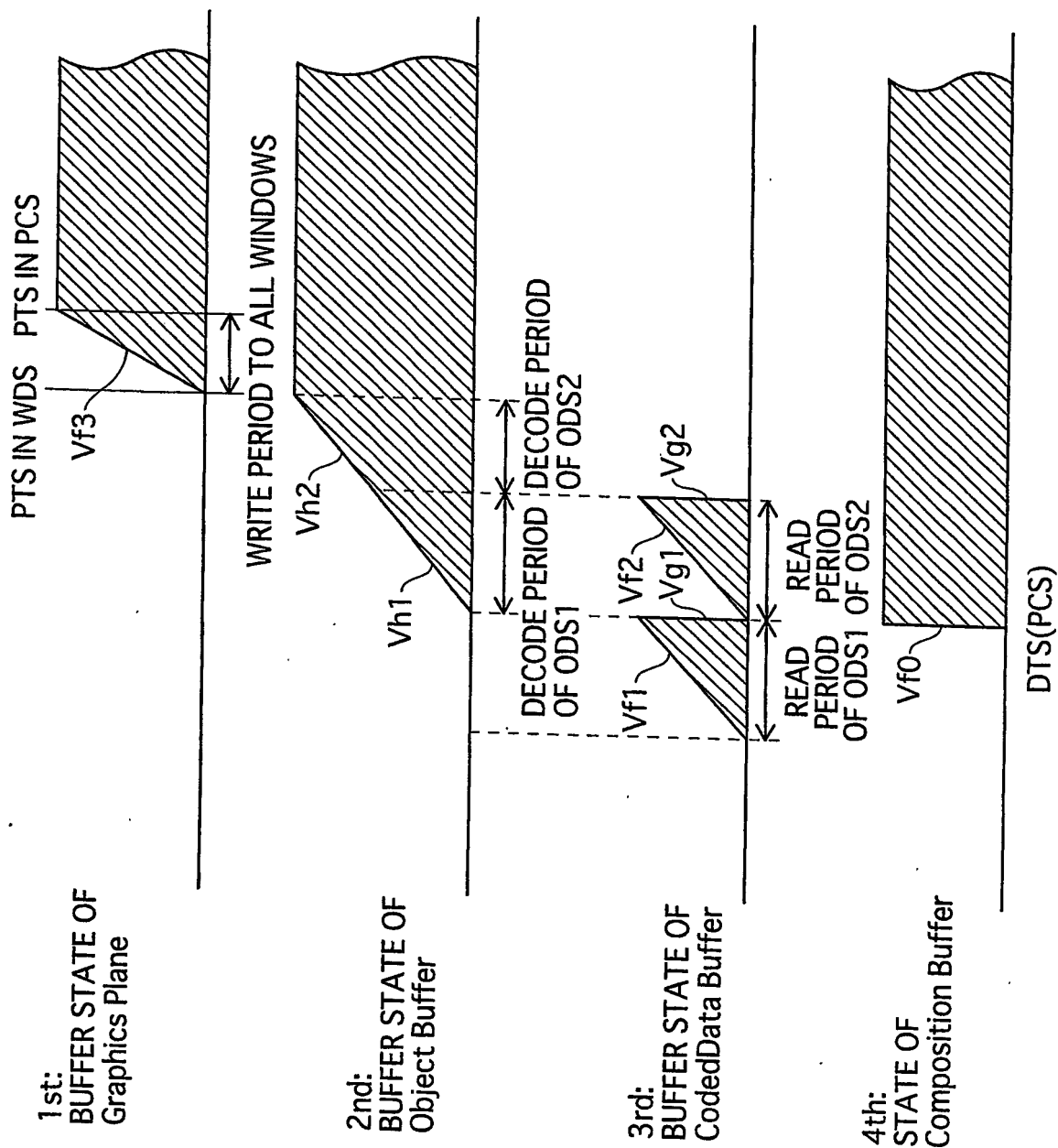


FIG. 32

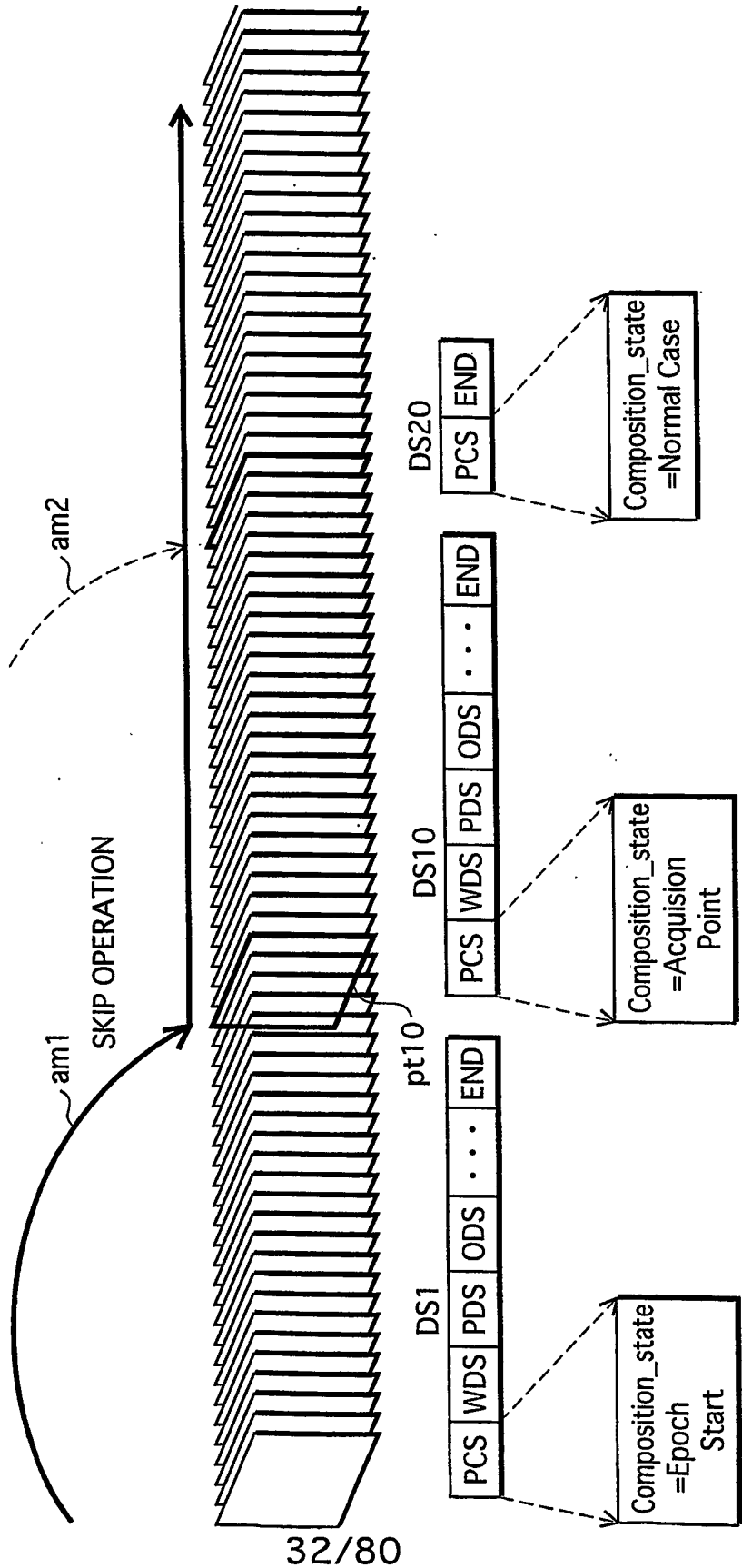


FIG. 33

CODED DATA BUFFER OF REPRODUCING APPARATUS

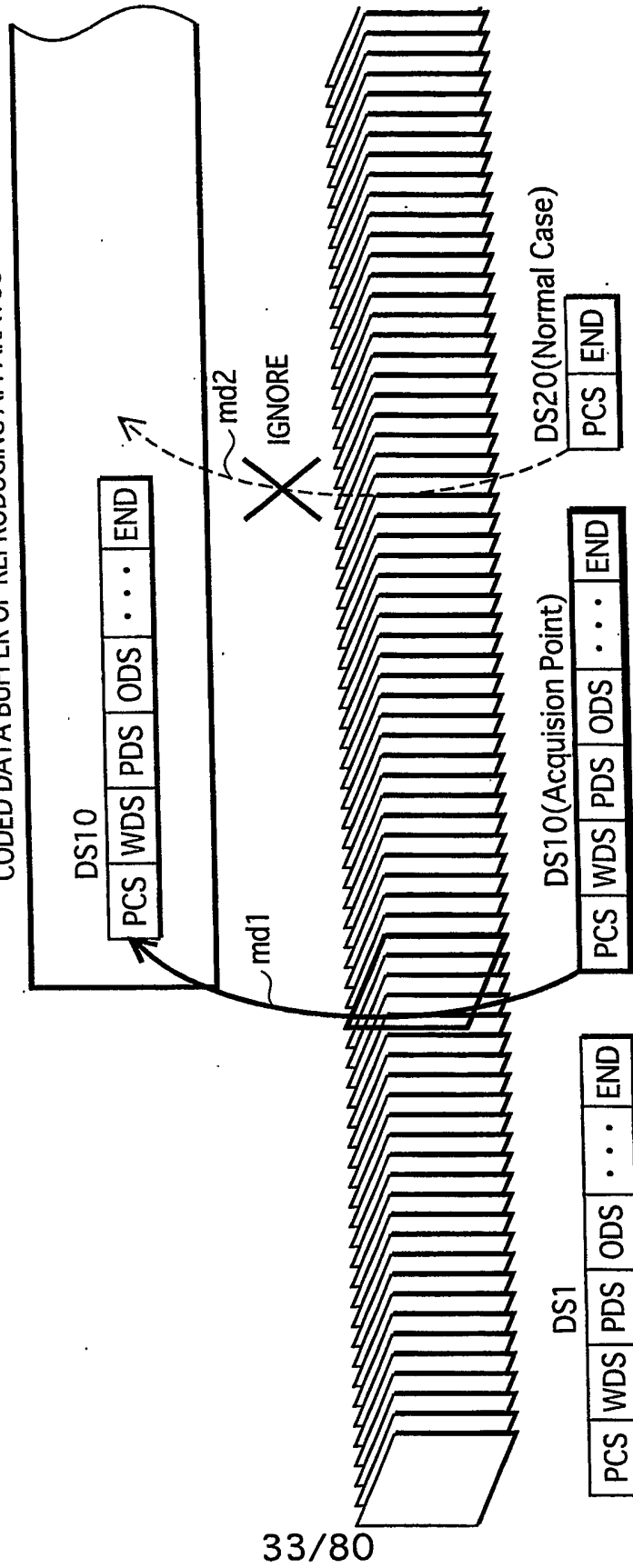


FIG. 34

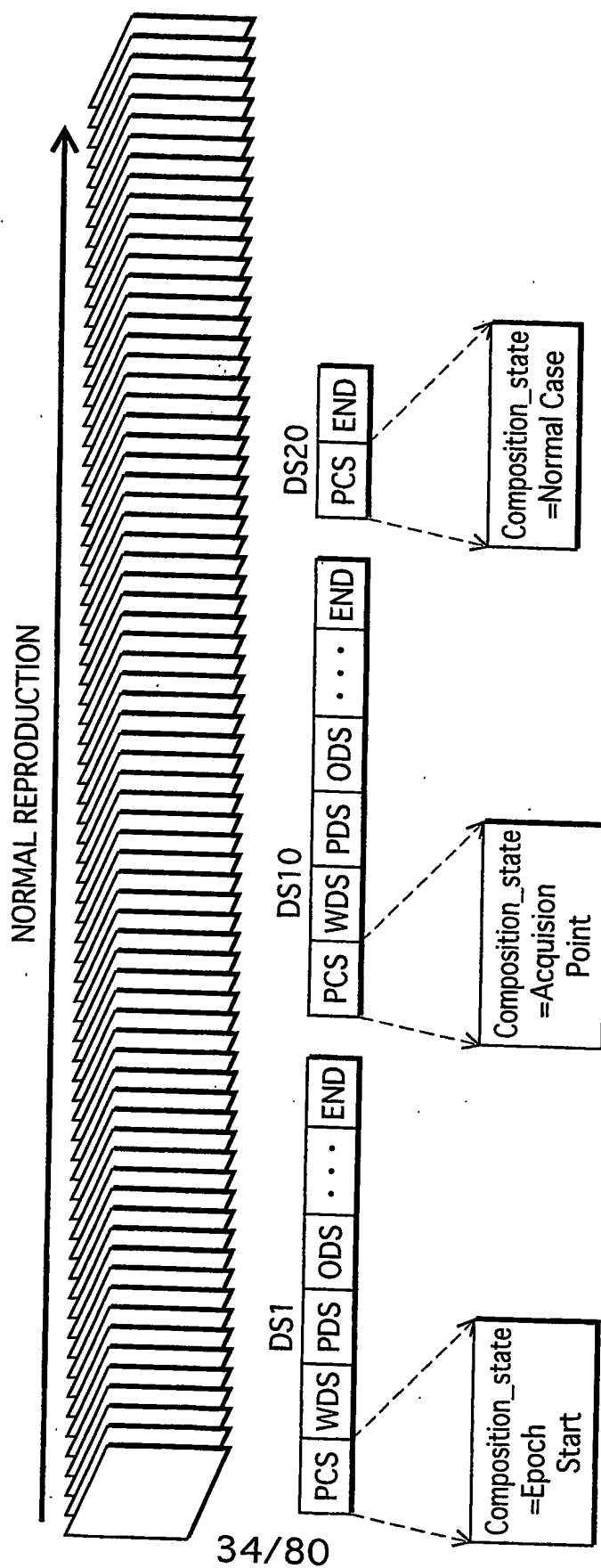


FIG. 35
CODED DATA BUFFER OF REPRODUCING APPARATUS

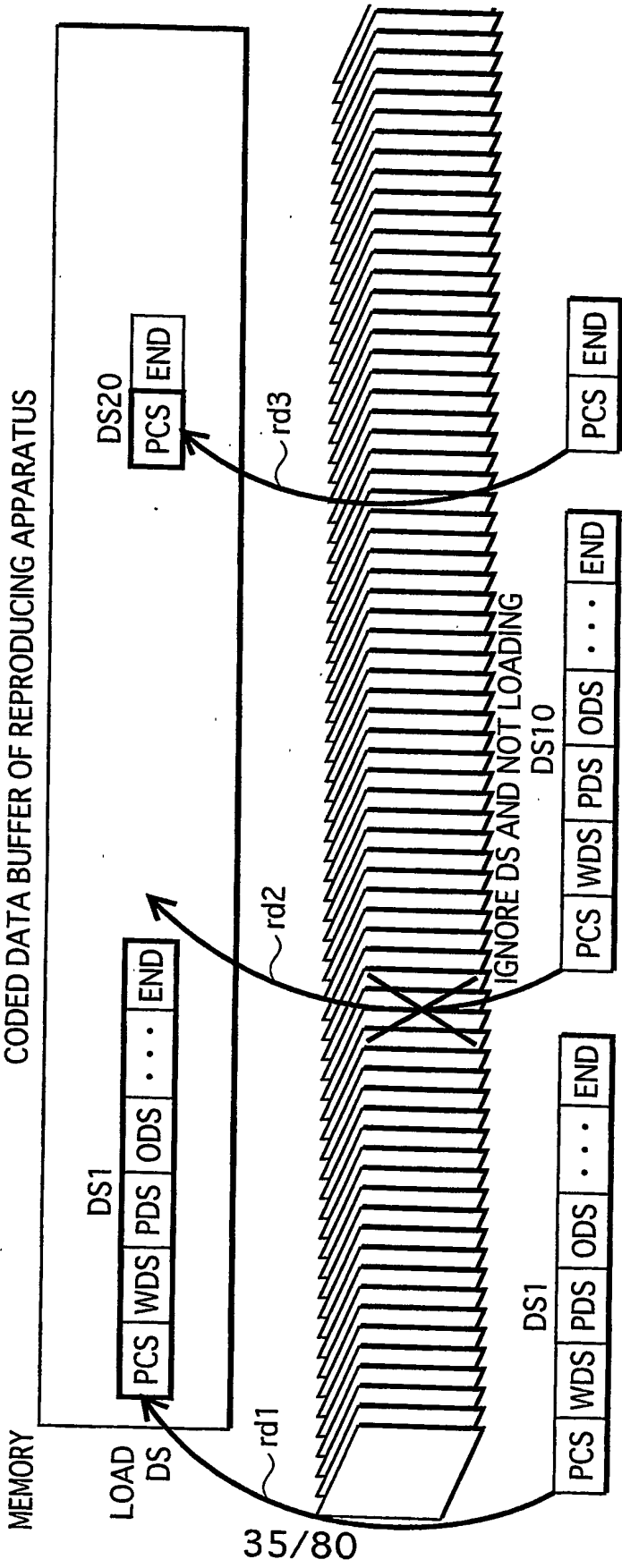


FIG. 36

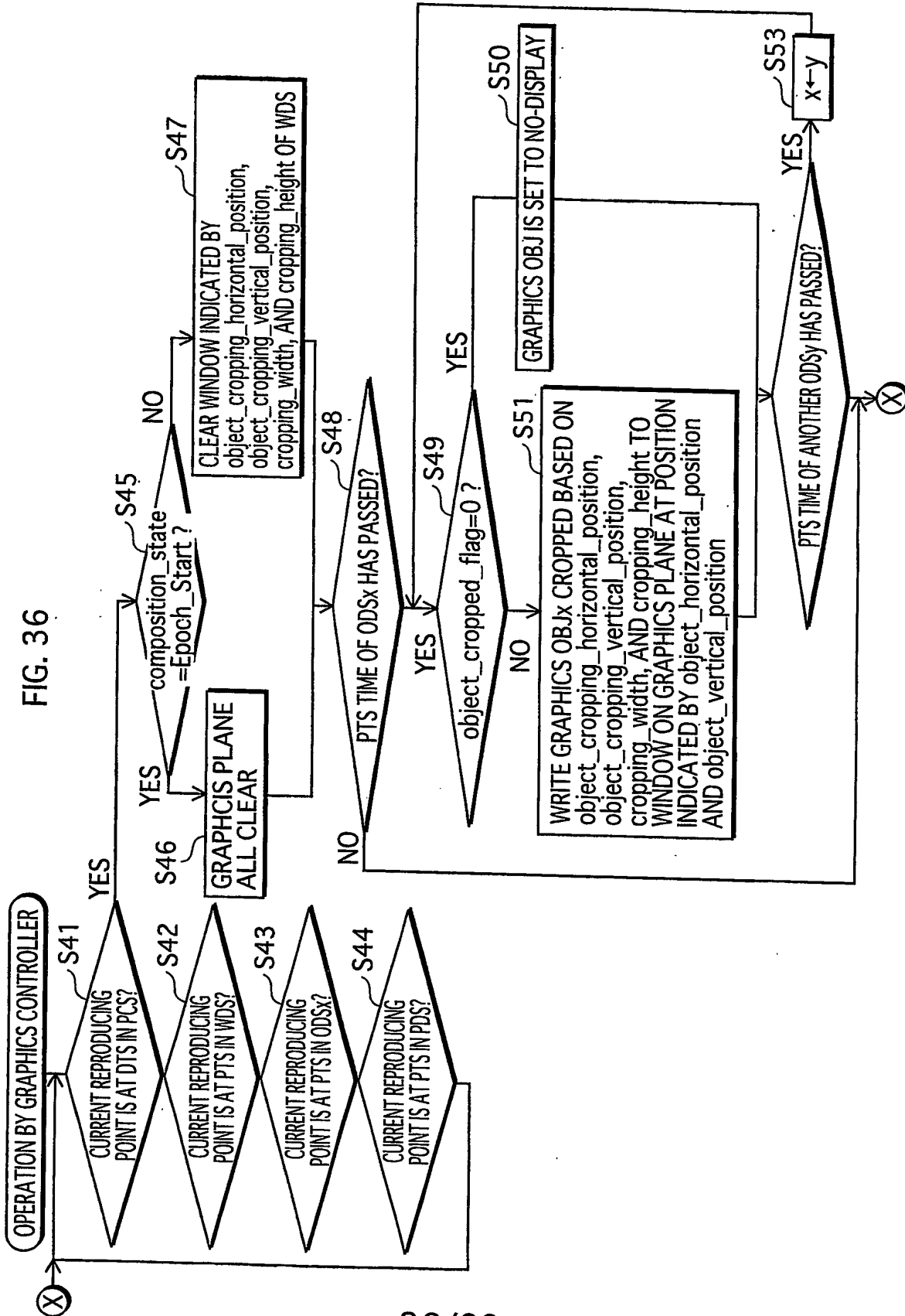


FIG. 37

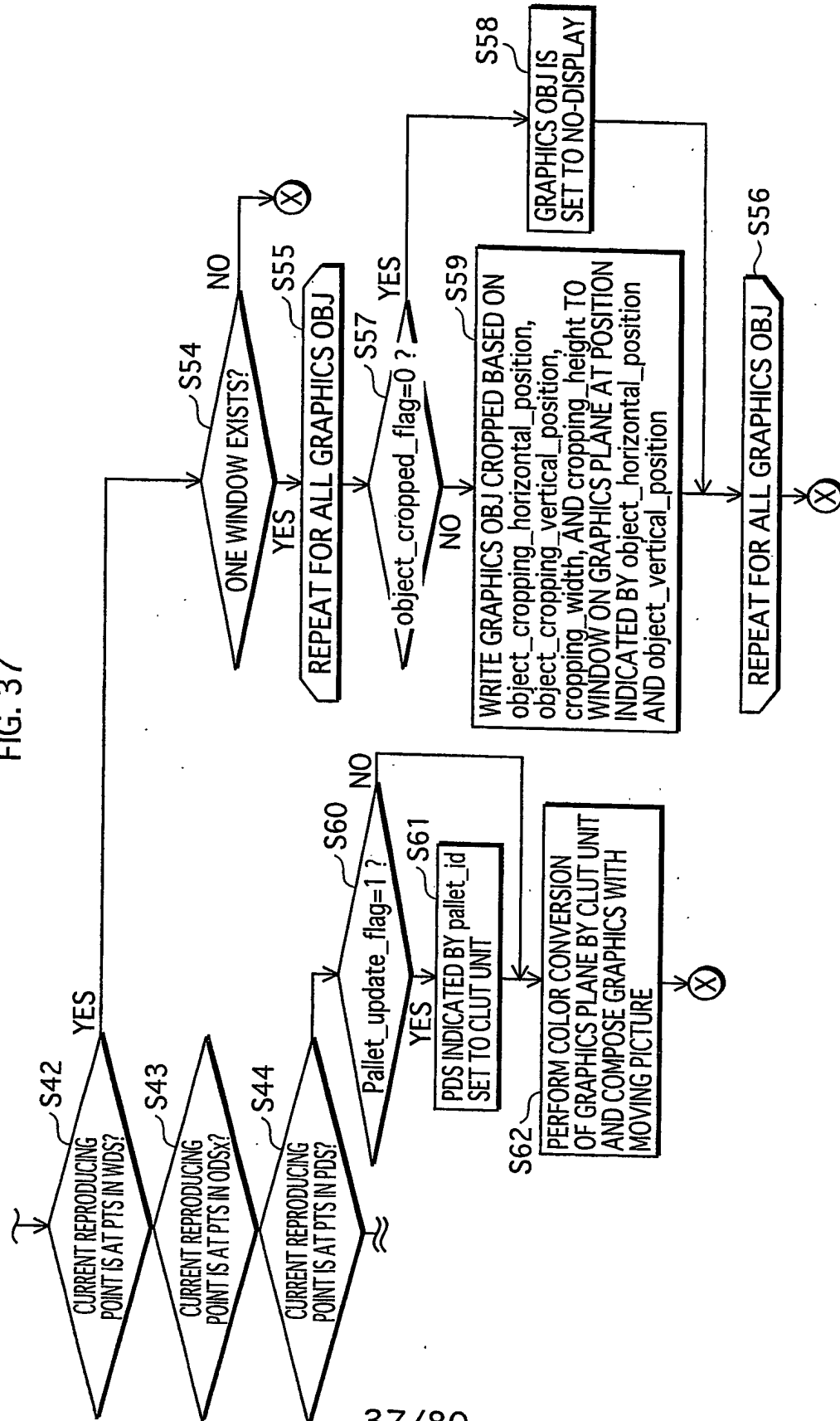


FIG. 38

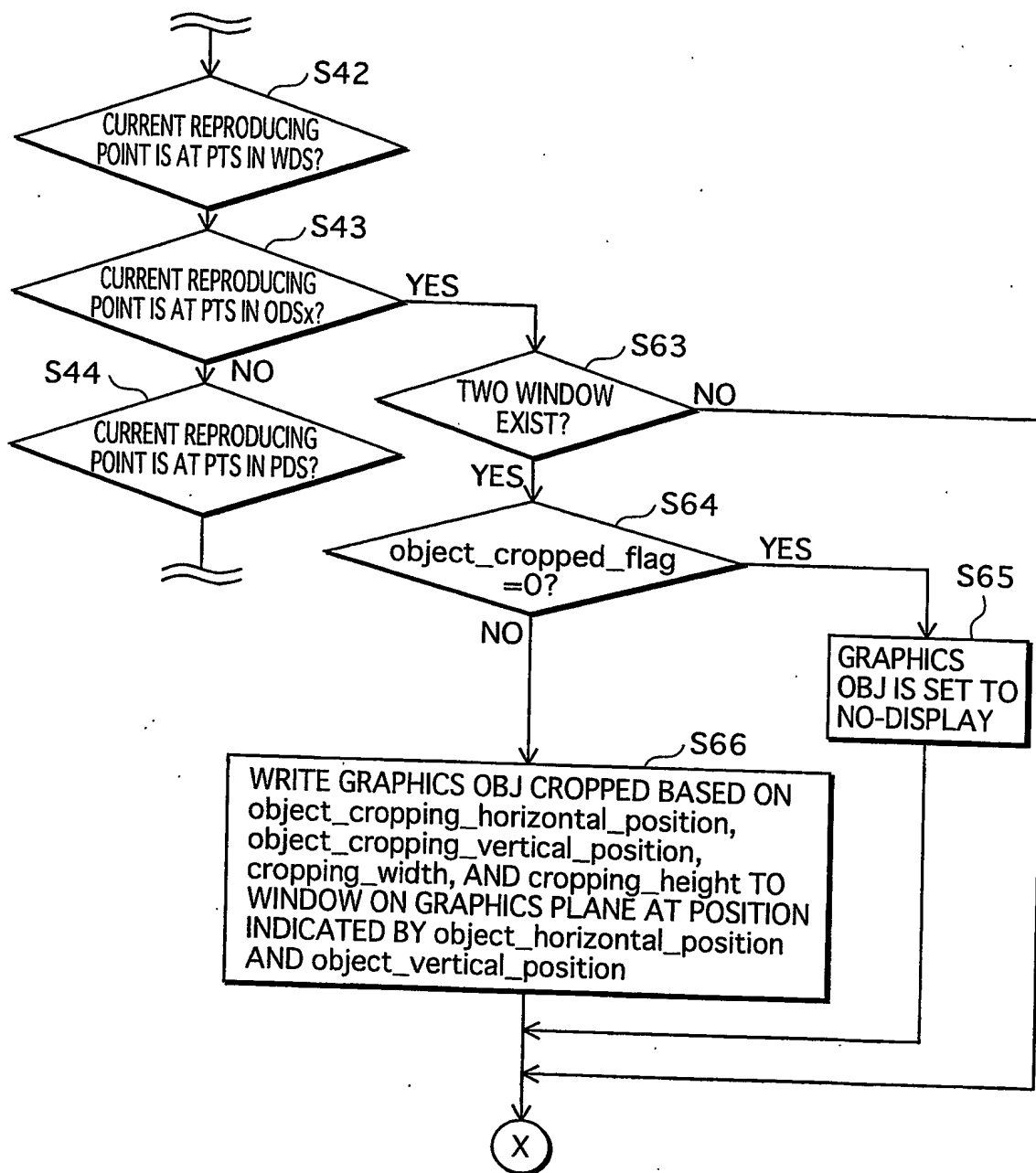


FIG. 39

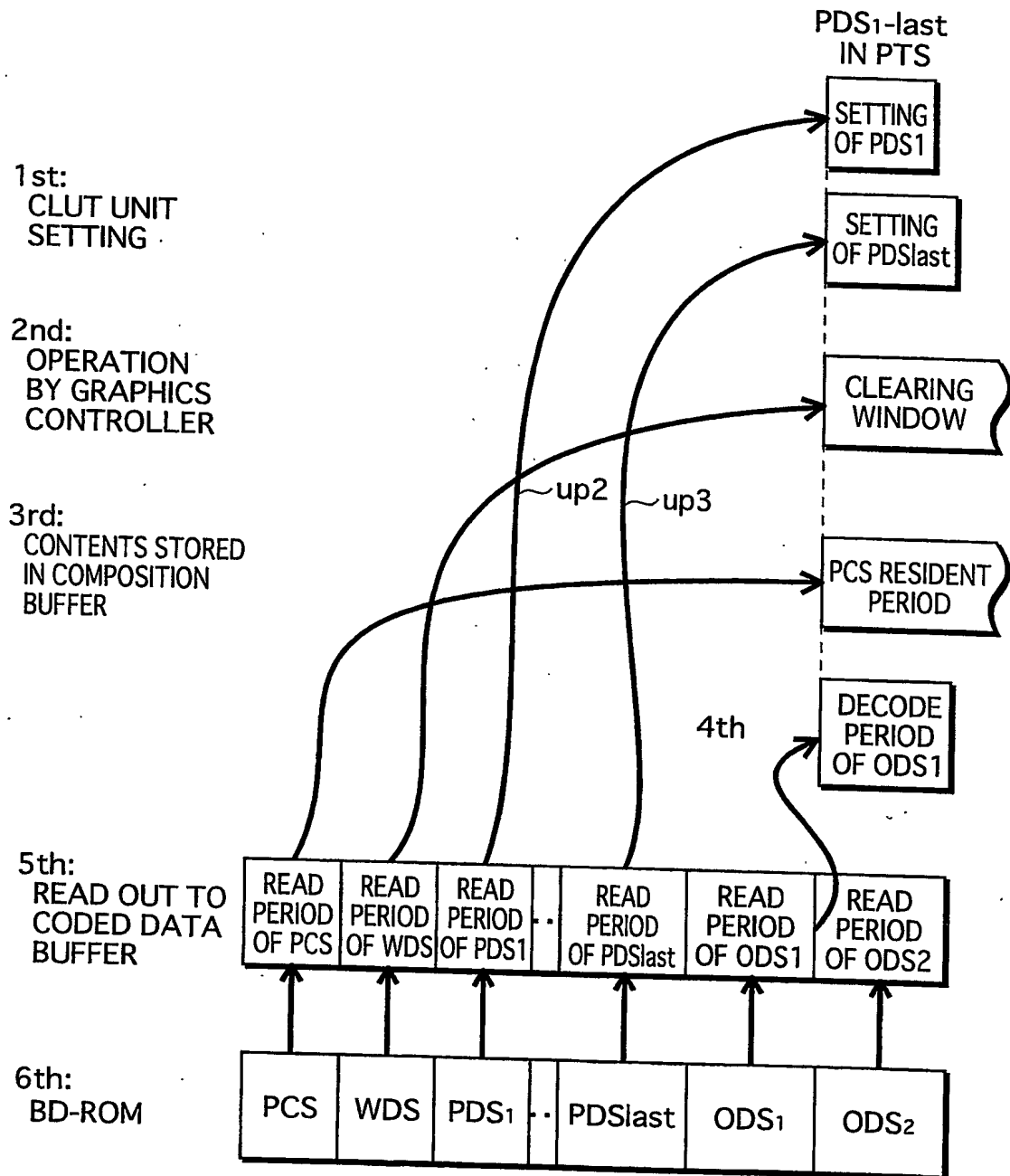
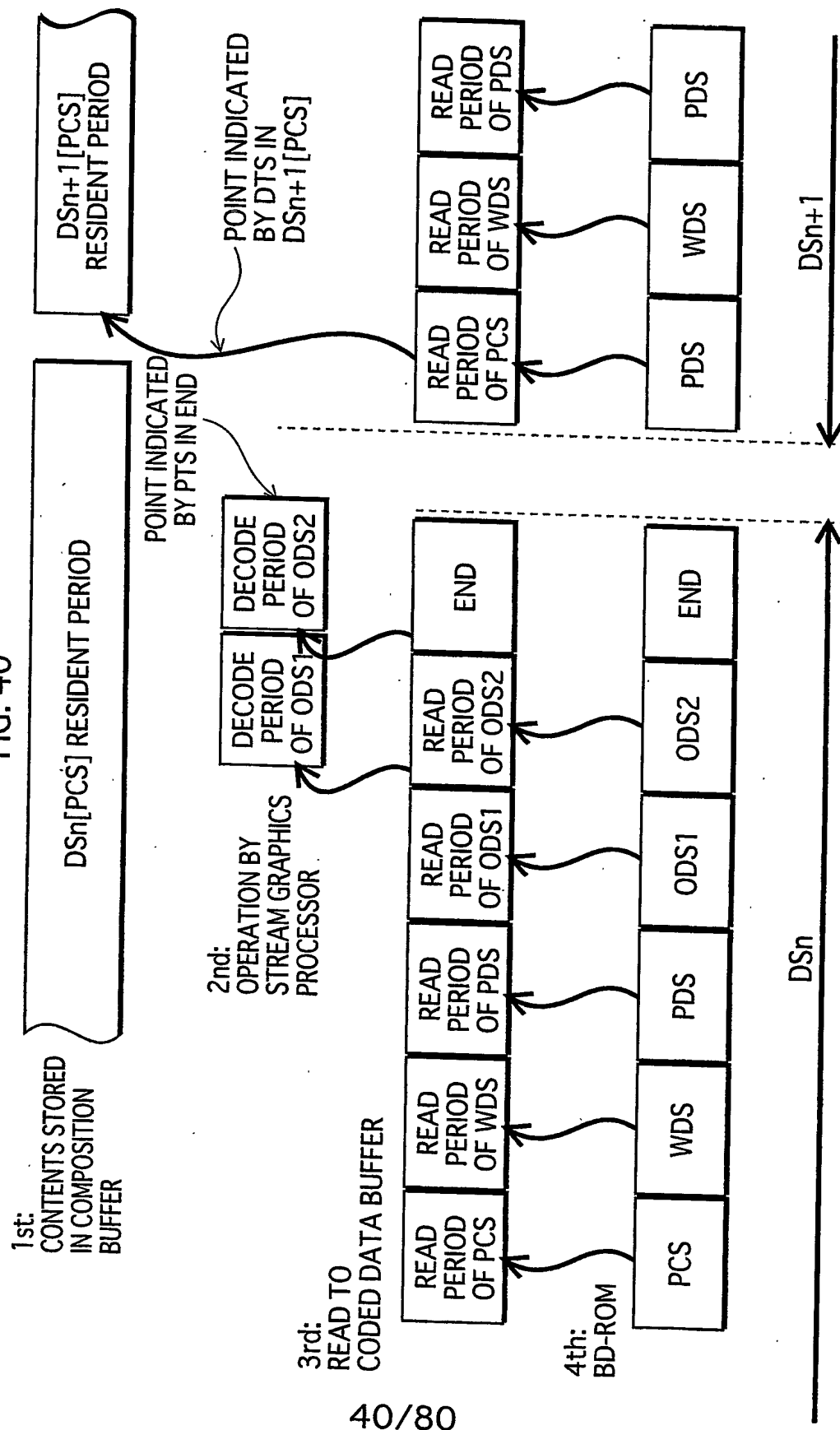


FIG. 40



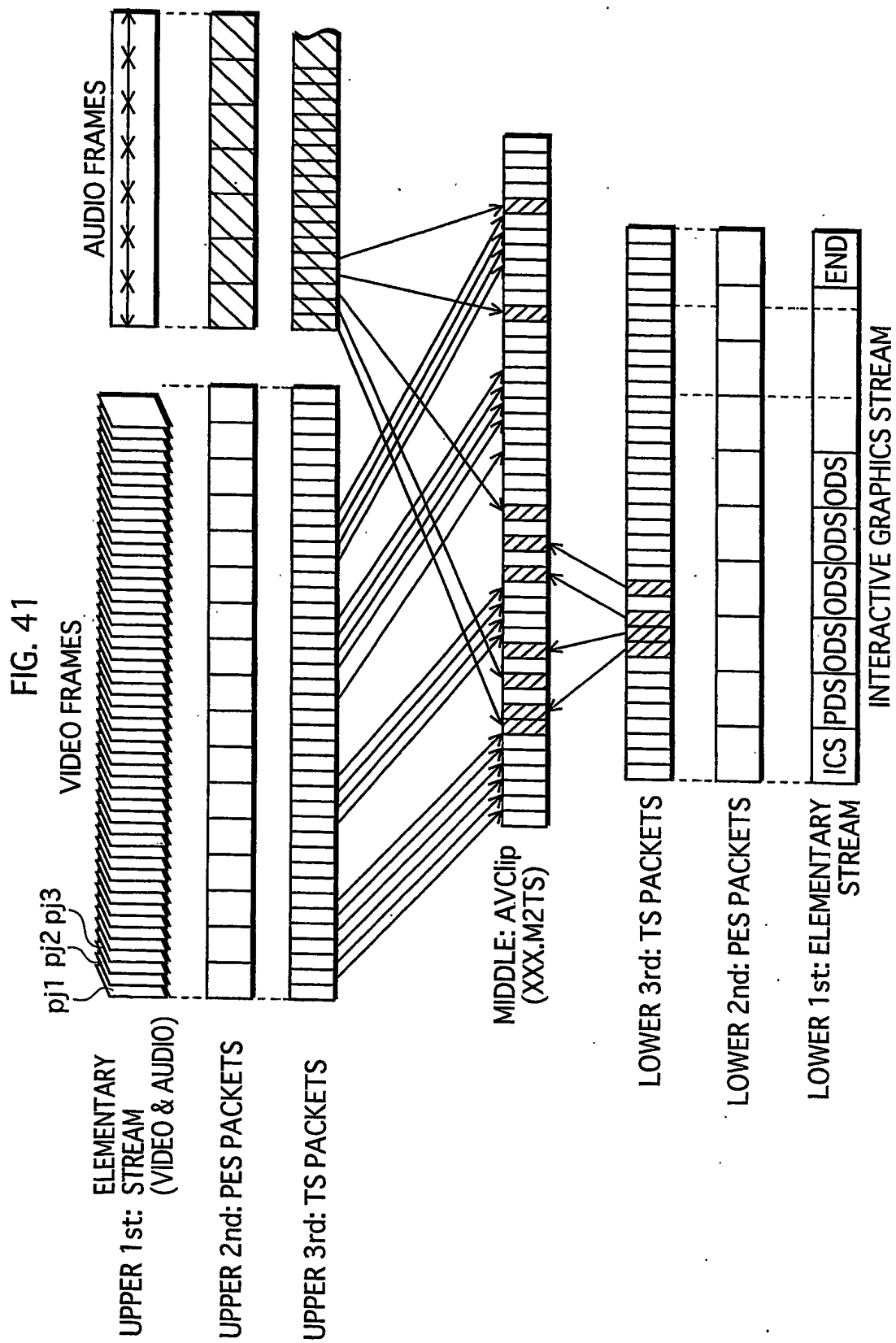


FIG.42A

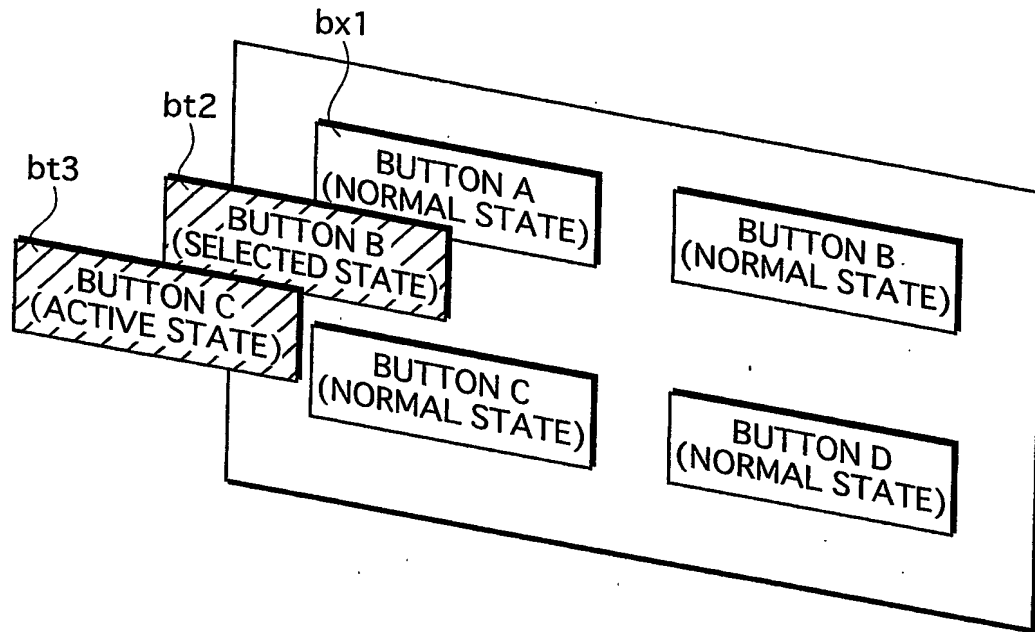


FIG.42B

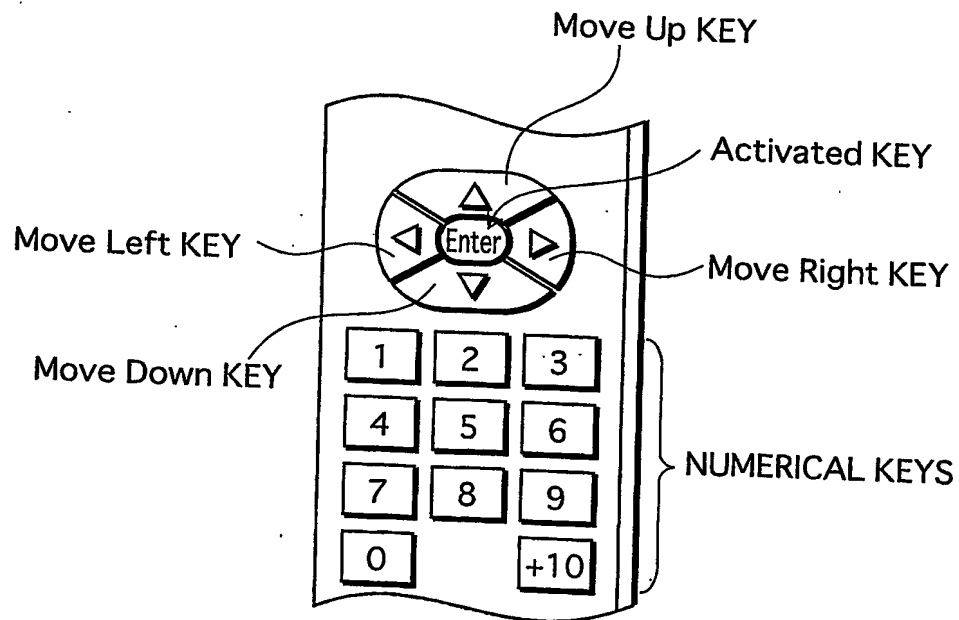
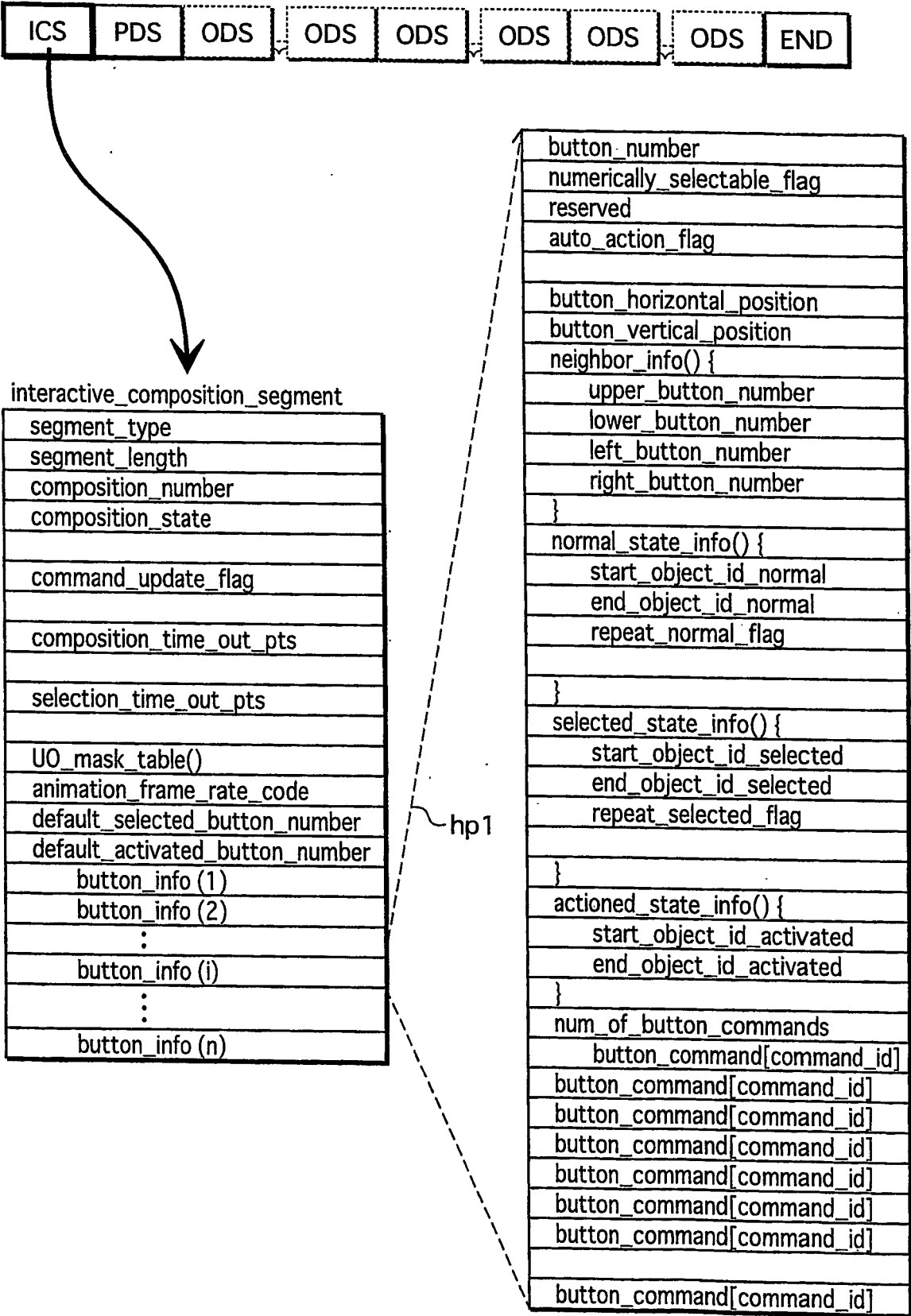
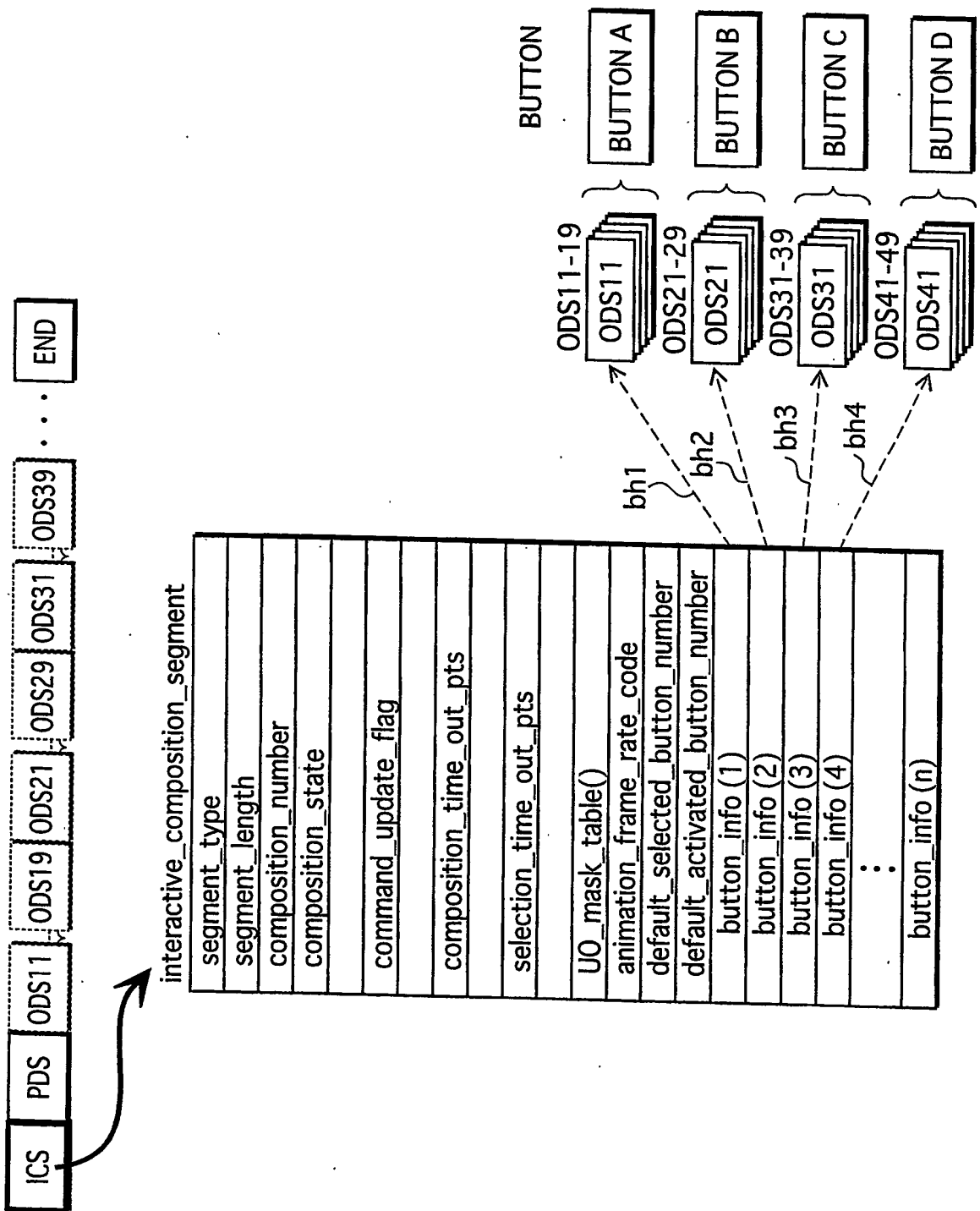


FIG.43





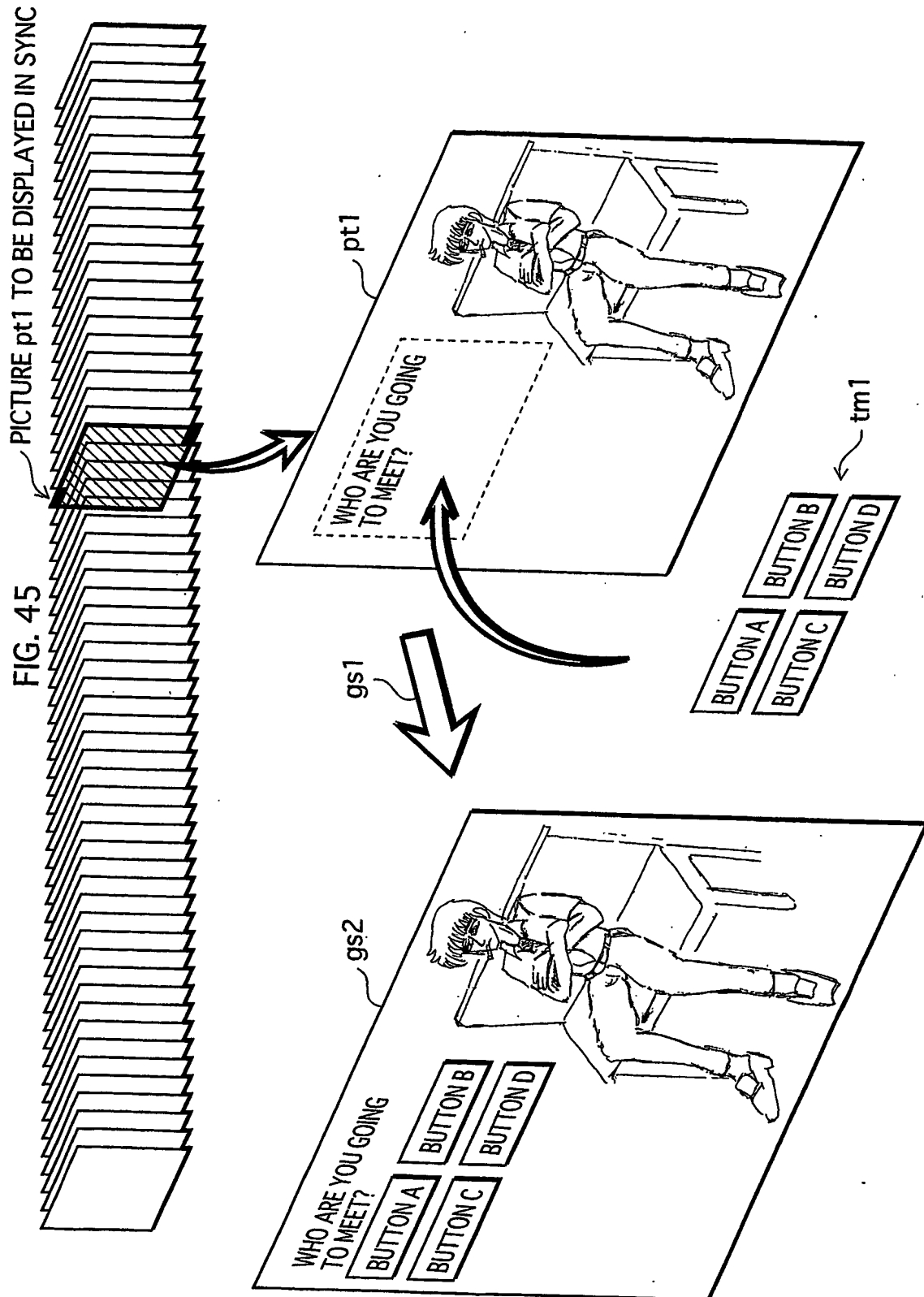
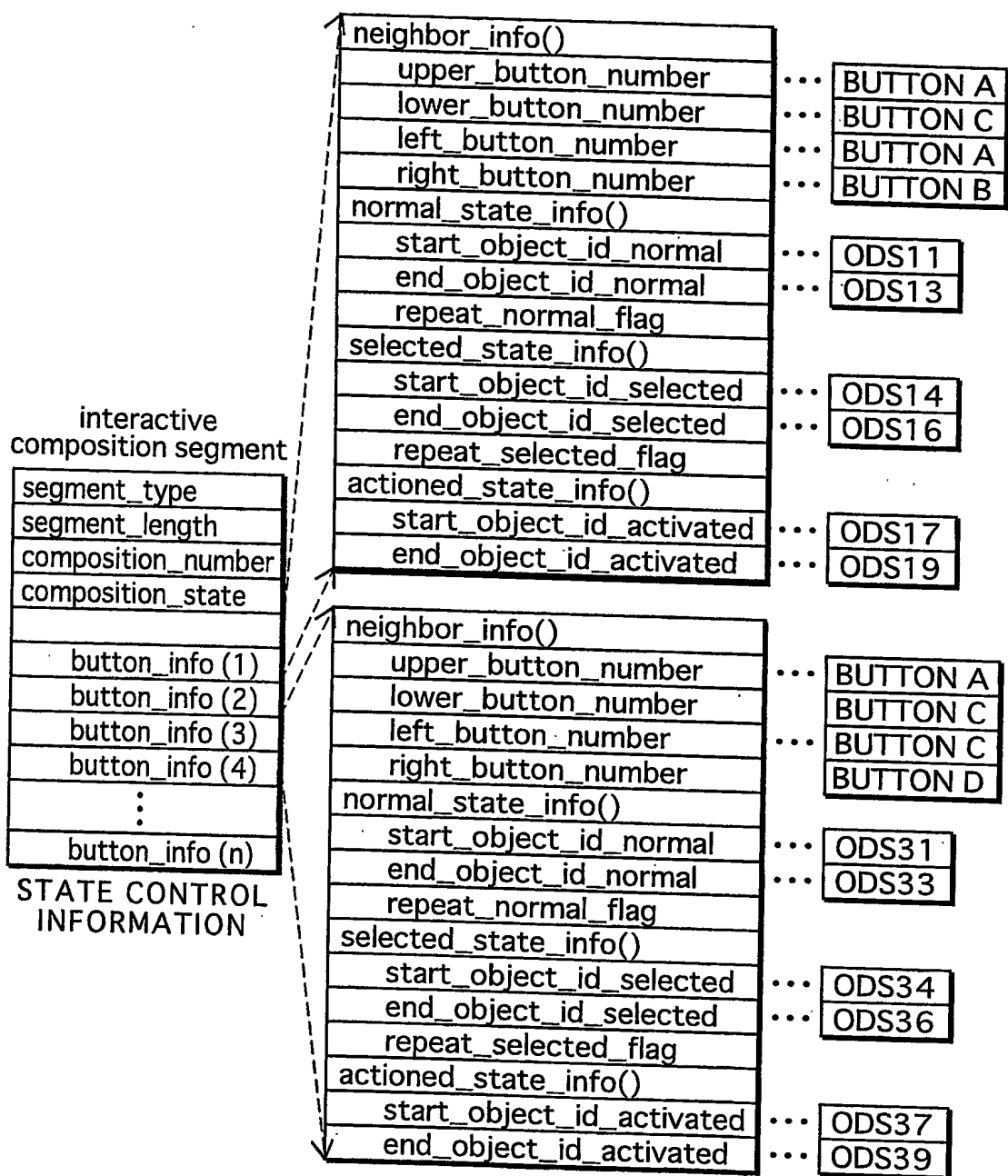


FIG.46



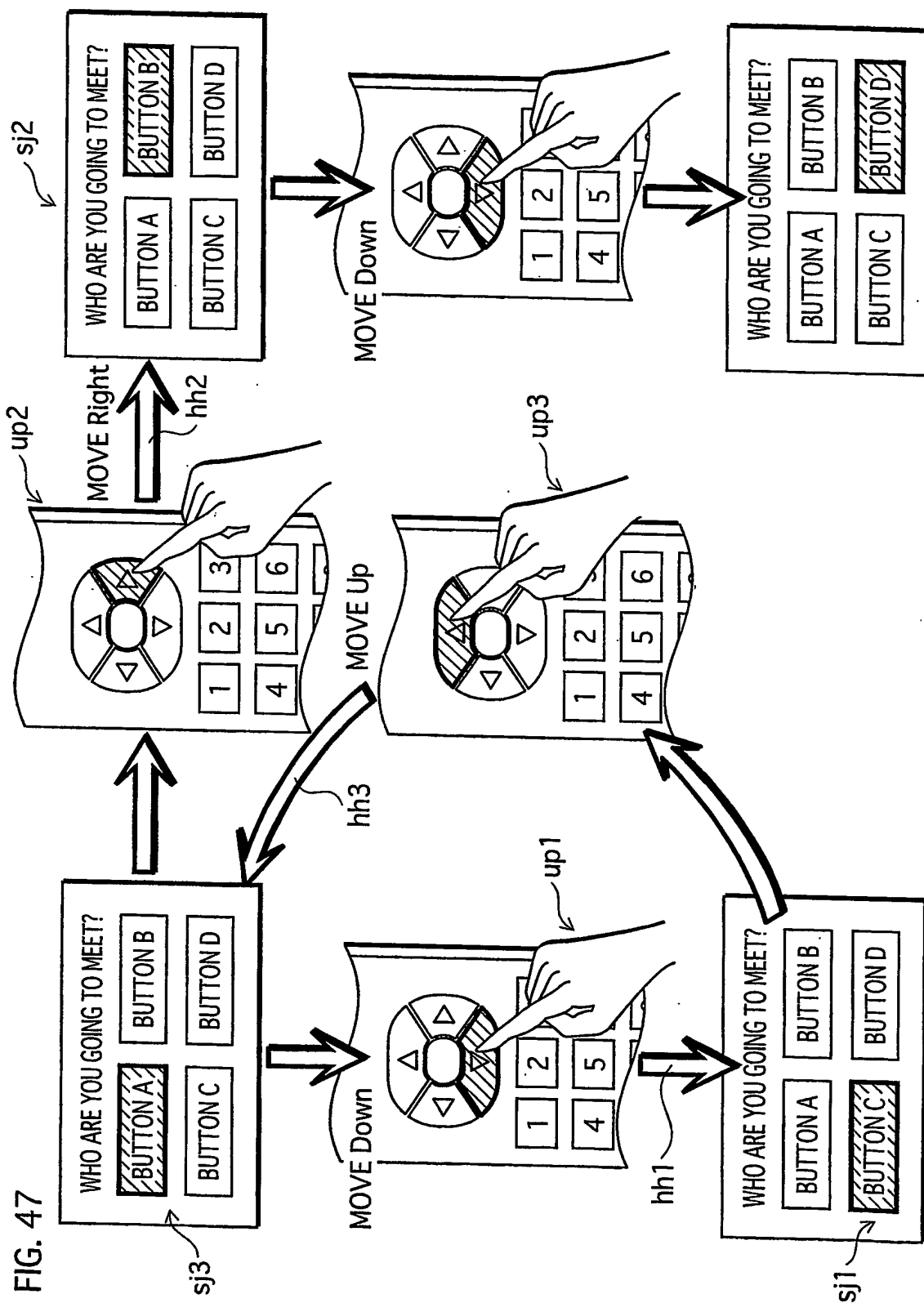


FIG.48

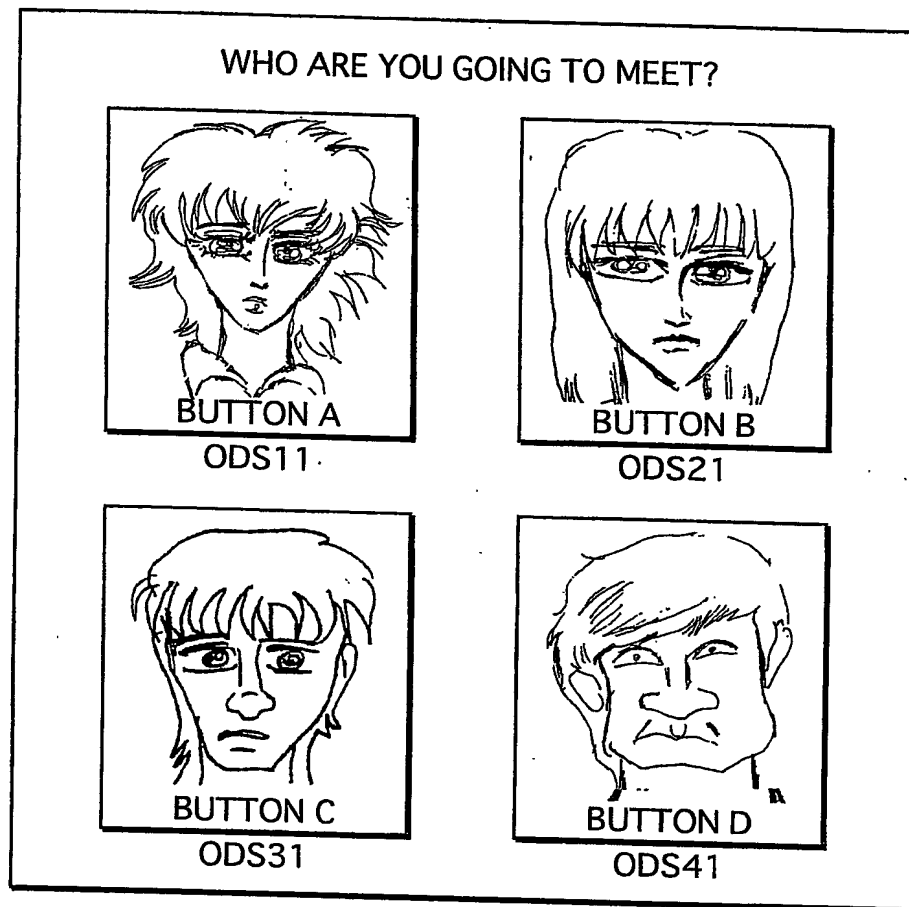


FIG.49

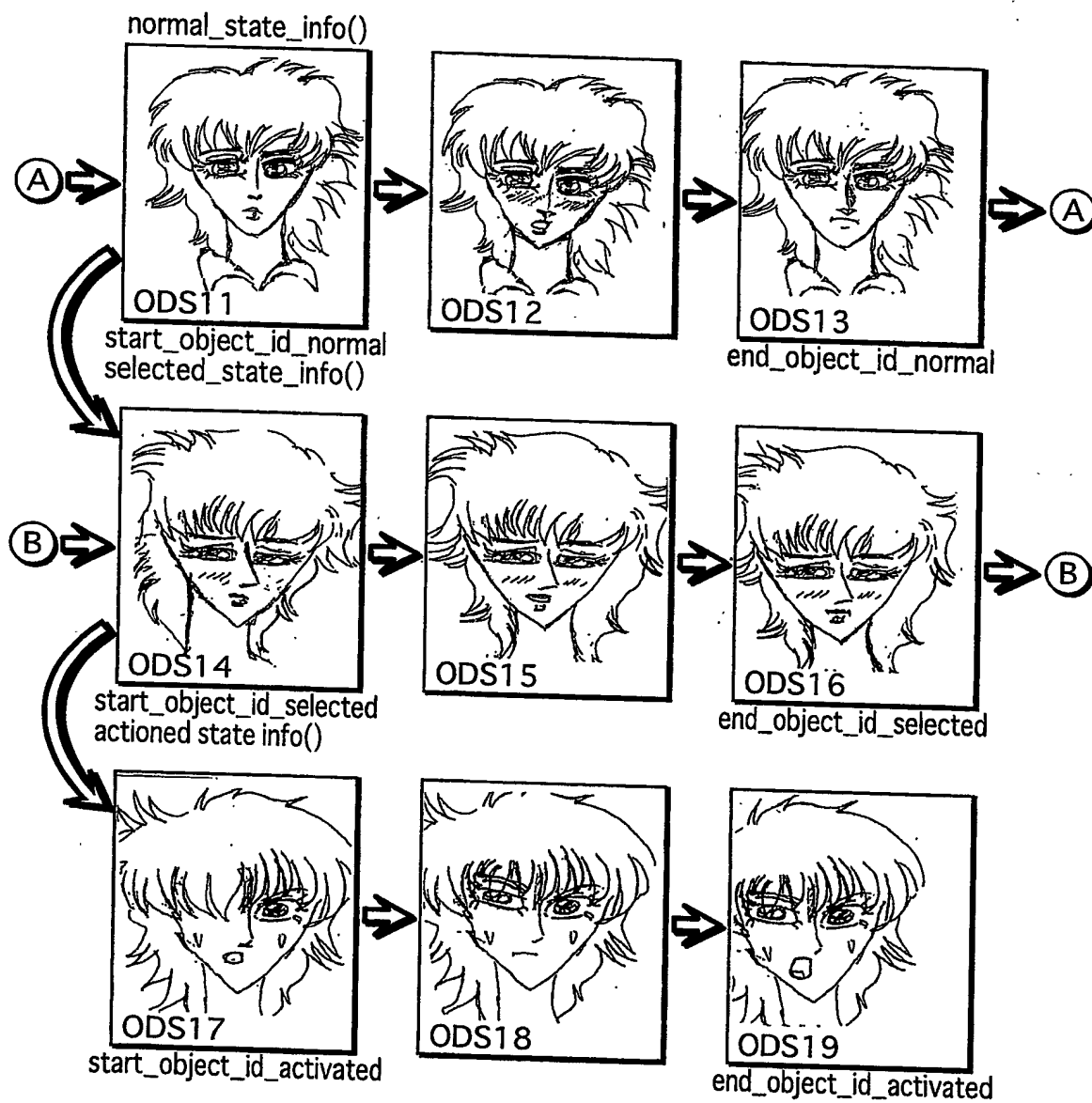


FIG. 50

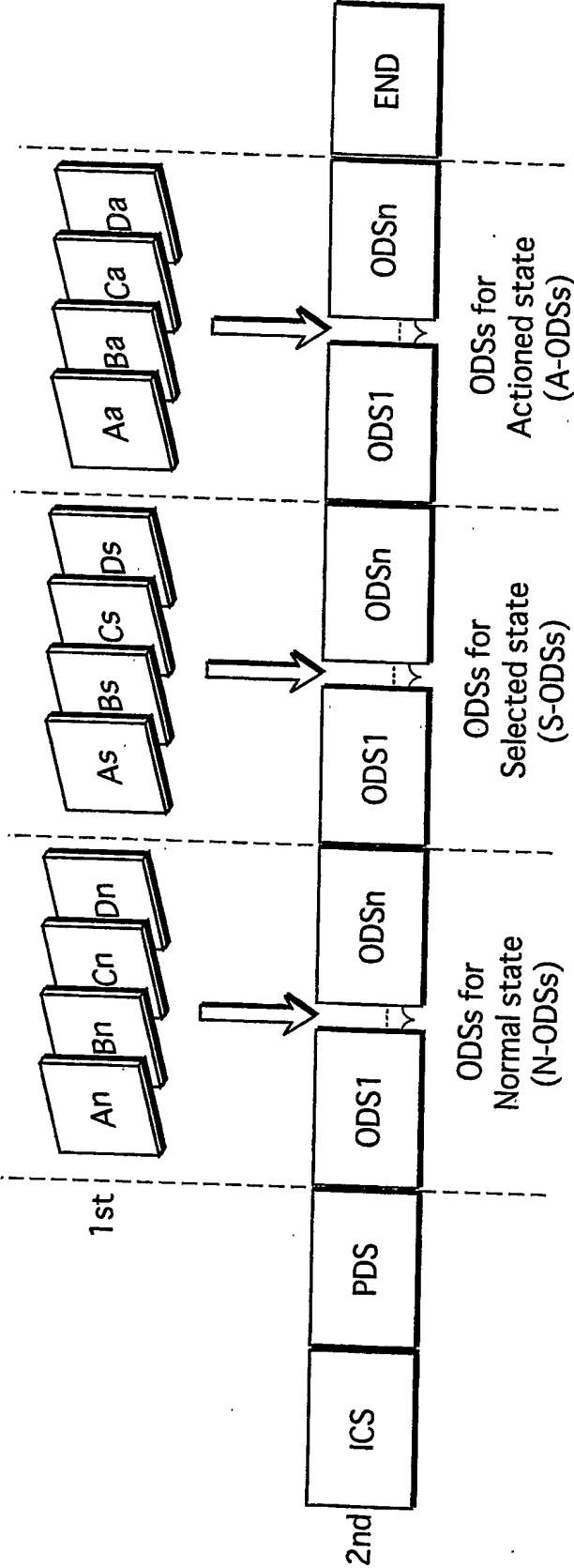
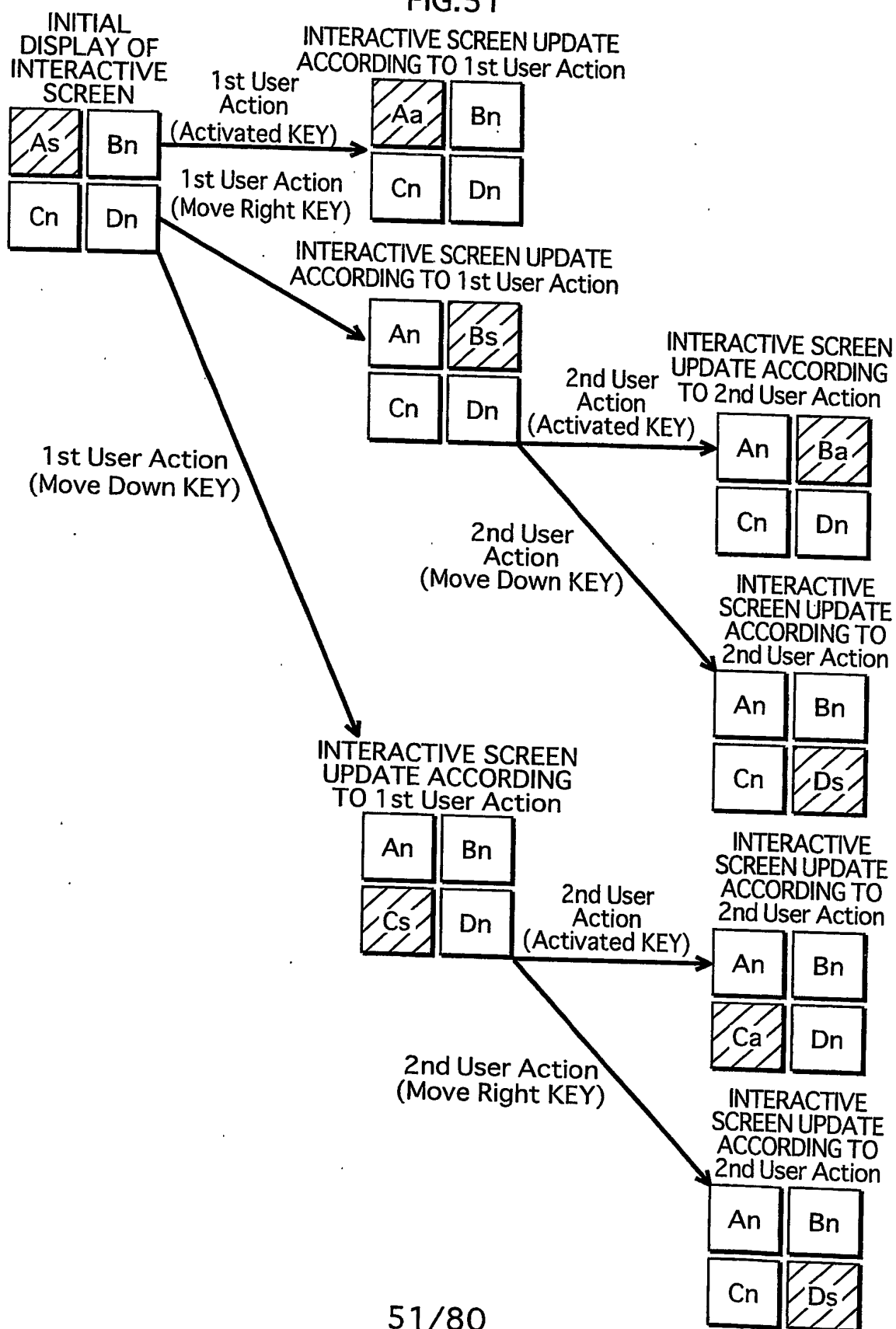


FIG. 51



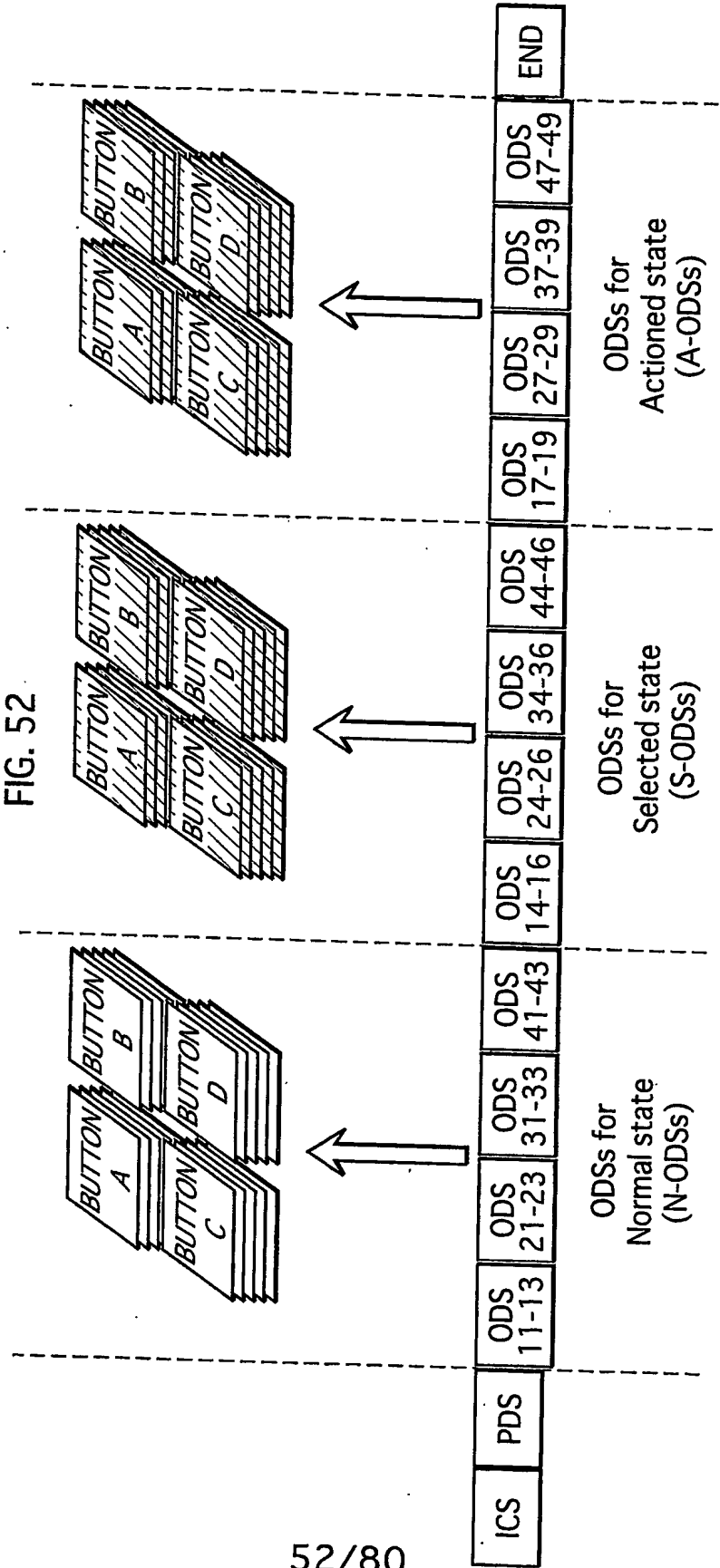


FIG. 53

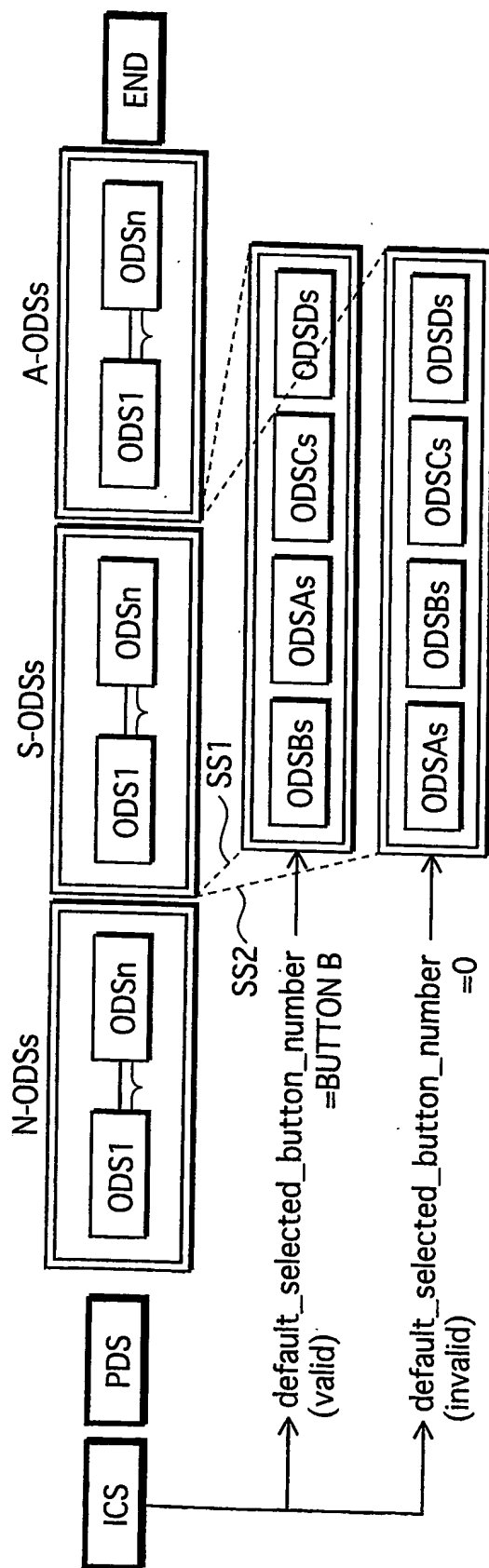
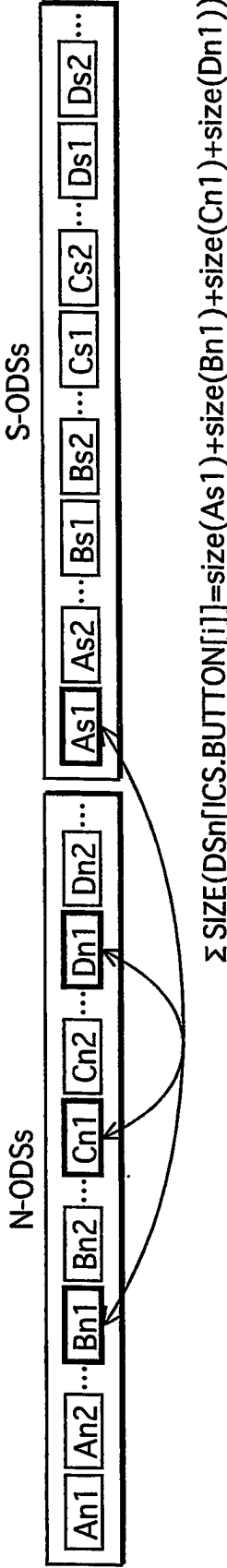


FIG. 54A

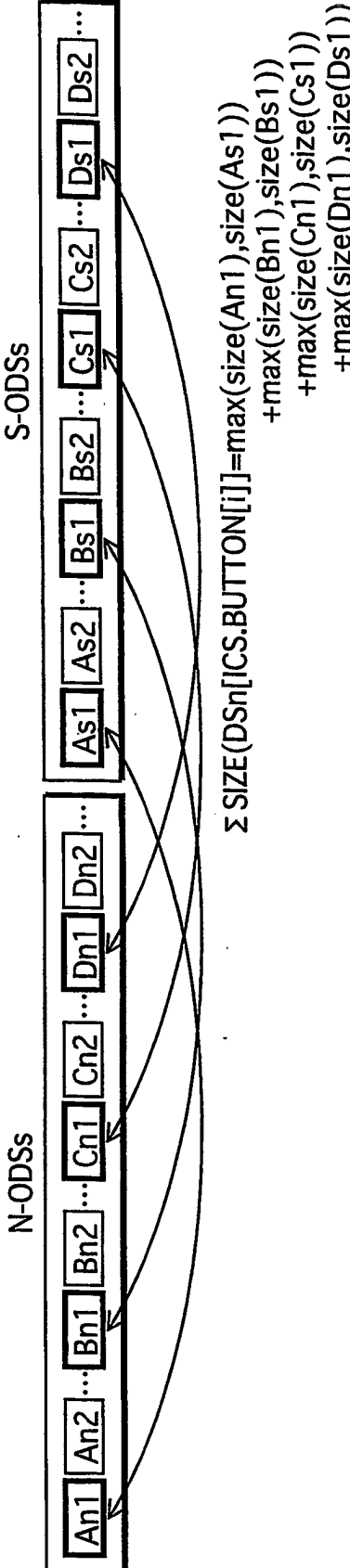
default_selected_button_number is indicated



$$\sum \text{SIZE}(\text{DSn}[\text{ICS.BUTTON}[i]] = \text{size}(\text{As1}) + \text{size}(\text{Bn1}) + \text{size}(\text{Cn1}) + \text{size}(\text{Dn1}))$$

FIG. 54B

default_selected_button_number=0



$$\begin{aligned} \sum \text{SIZE}(\text{DSn}[\text{ICS.BUTTON}[i]] = & \max(\text{size}(\text{An1}), \text{size}(\text{As1})) \\ & + \max(\text{size}(\text{Bn1}), \text{size}(\text{Bs1})) \\ & + \max(\text{size}(\text{Cn1}), \text{size}(\text{Cs1})) \\ & + \max(\text{size}(\text{Dn1}), \text{size}(\text{Ds1})) \end{aligned}$$

FIG. 55

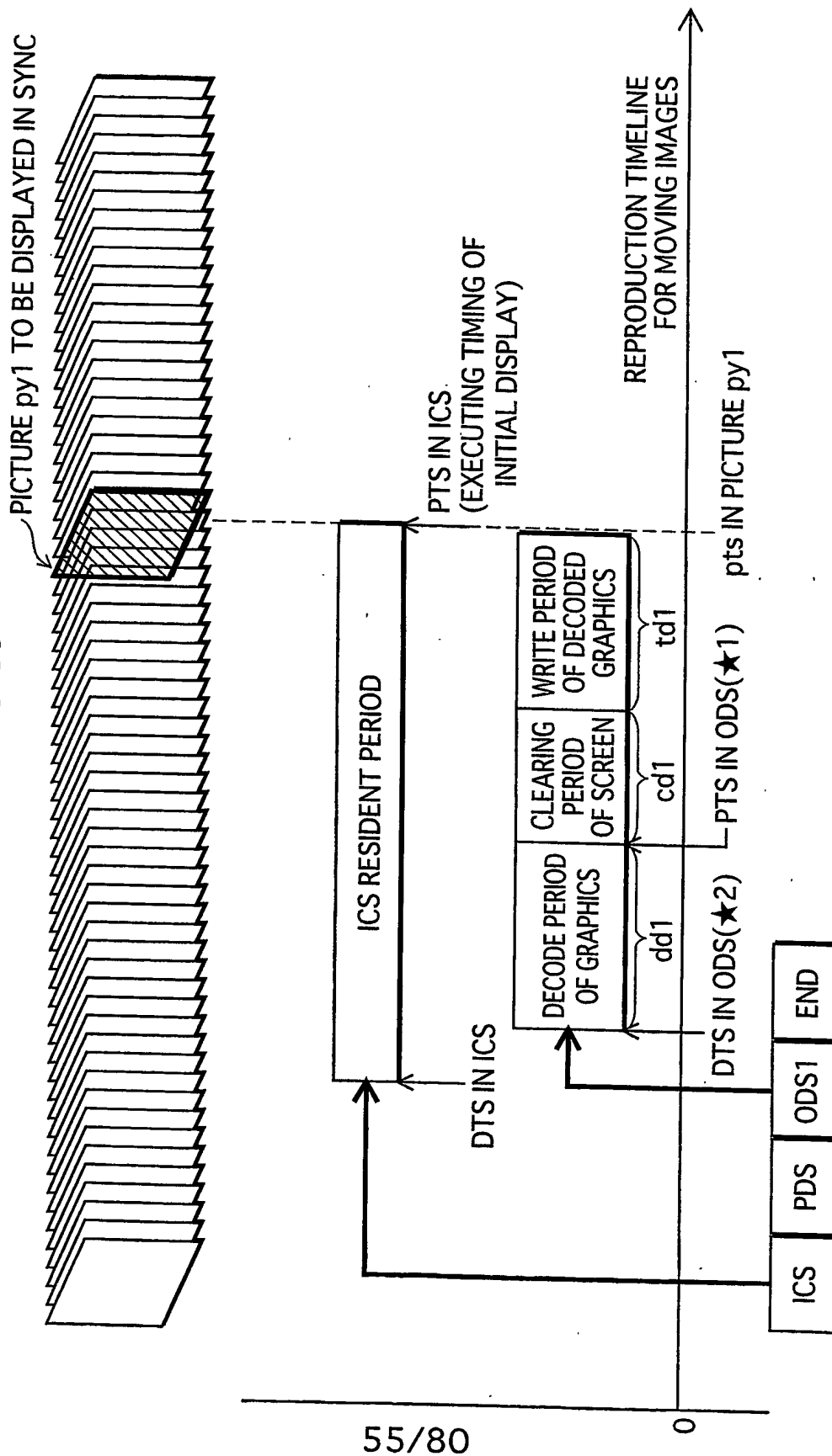


FIG. 56

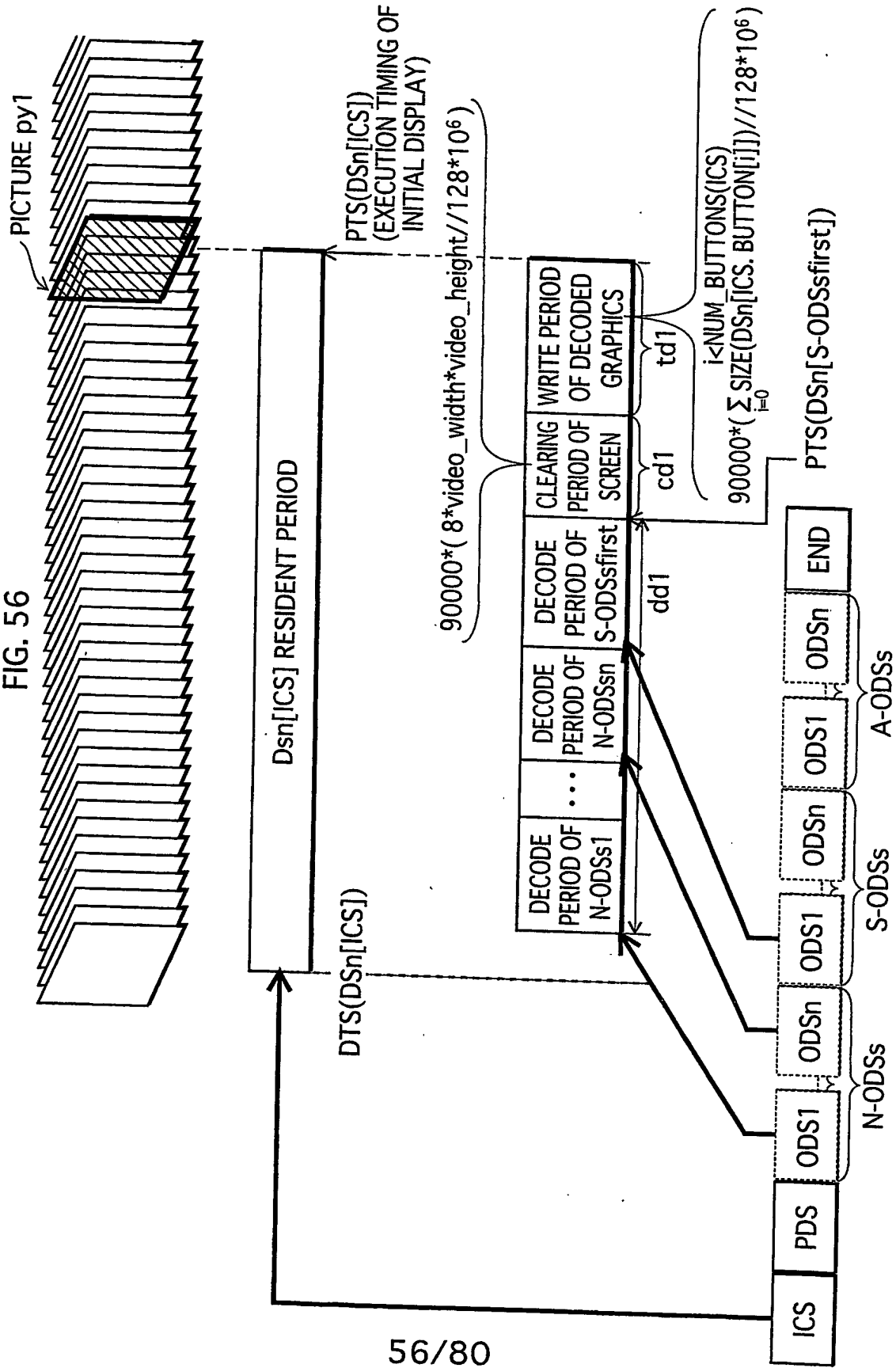
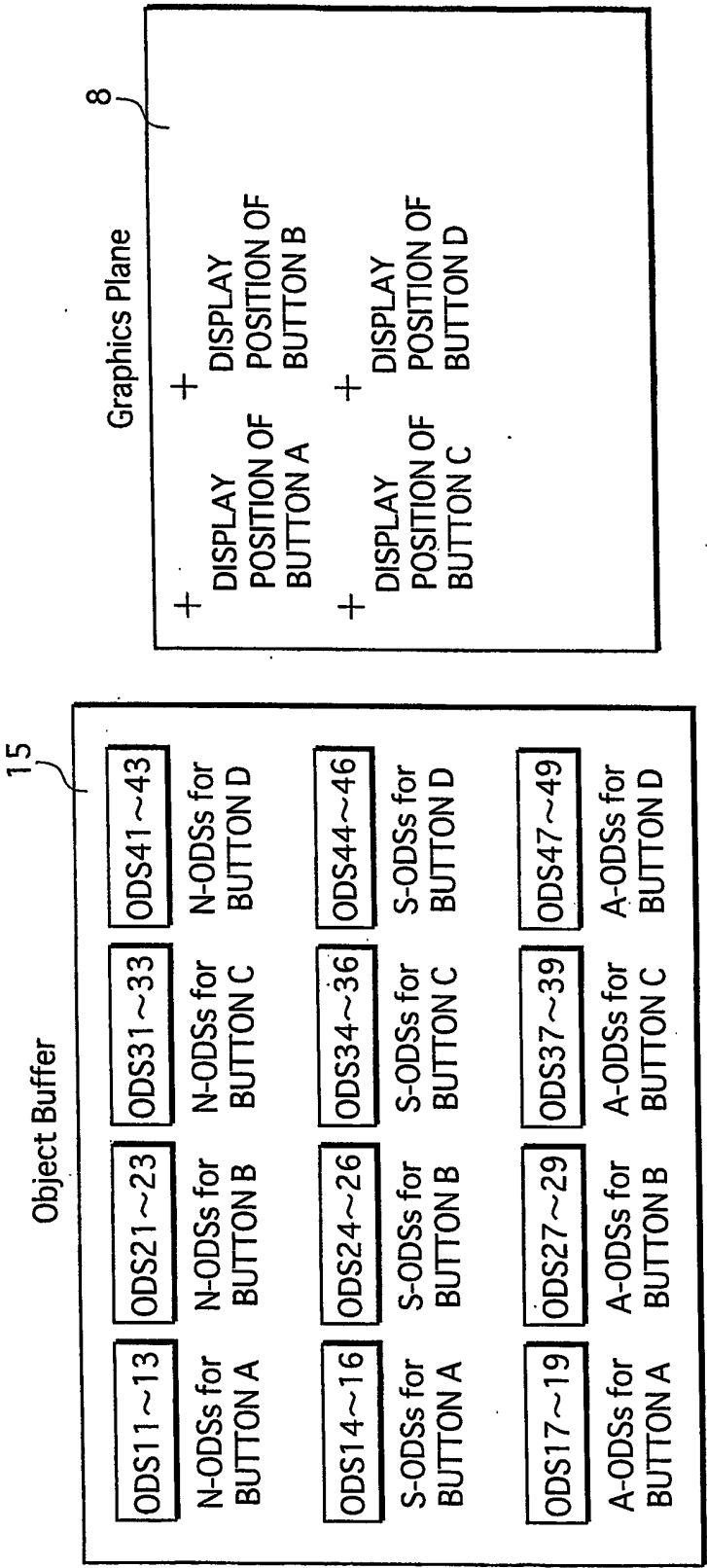


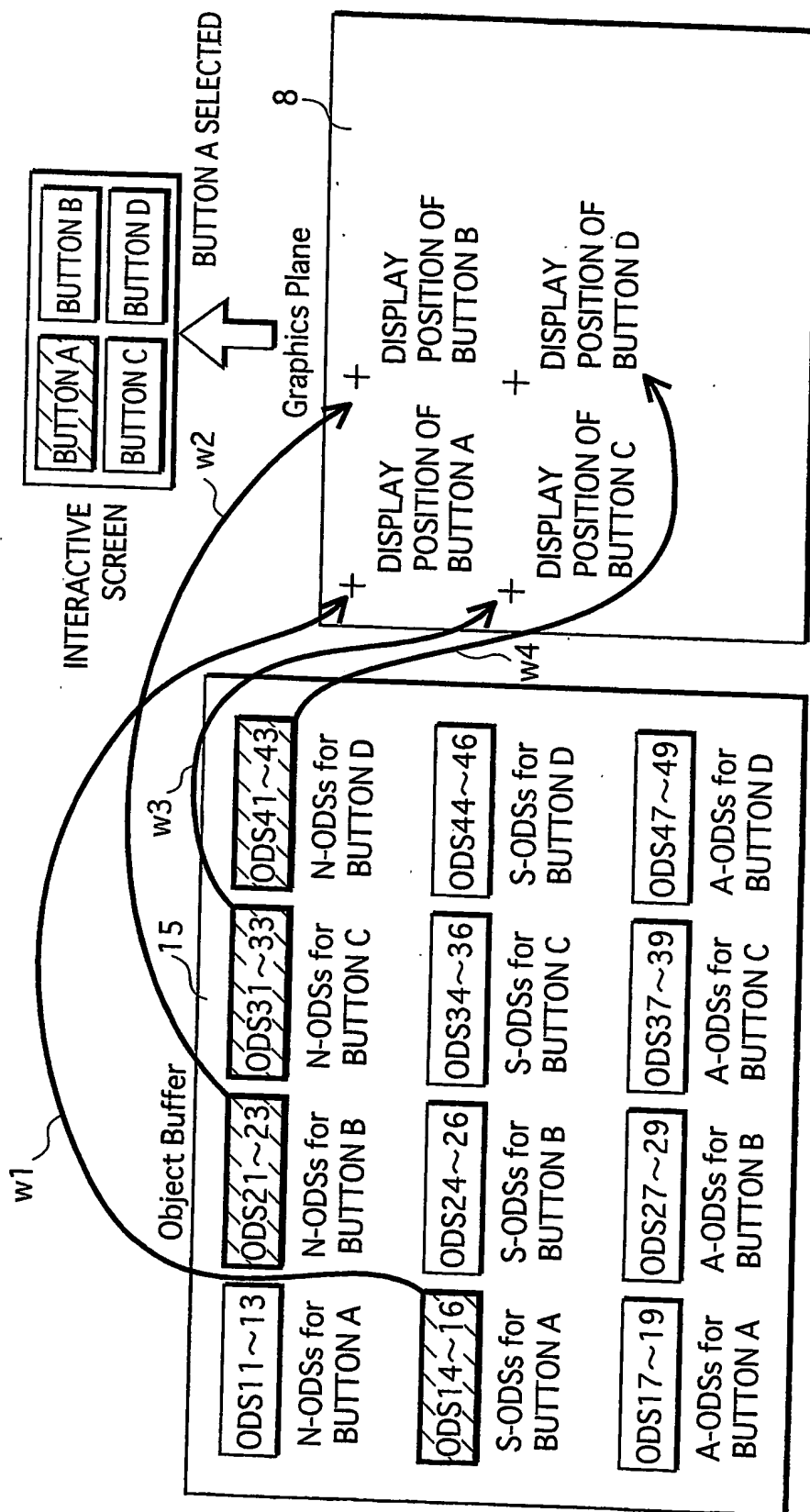
FIG. 58



DISPLAY POSITION OF BUTTON=DISPLAY POSITION DEFINED
BY button_horizontal position, button_vertical_position
OF BUTTON INFORMATION

FIG. 59

WRITE OPERATION OF Graphics Controller AT INITIAL DISPLAY



DISPLAY POSITION OF BUTTON=DISPLAY POSITION DEFINED BY button_horizontal_position, button_vertical_position OF BUTTON INFORMATION

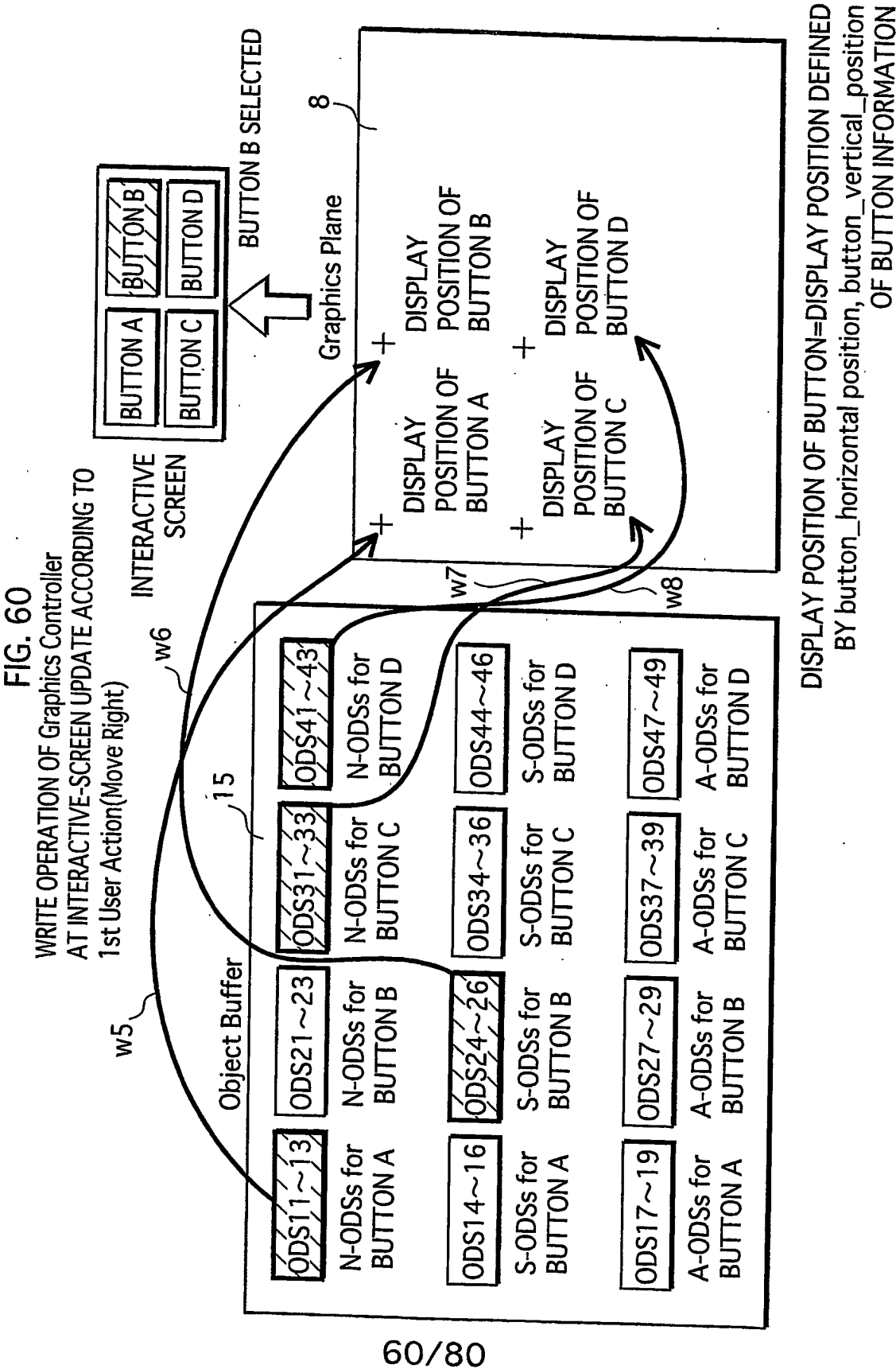
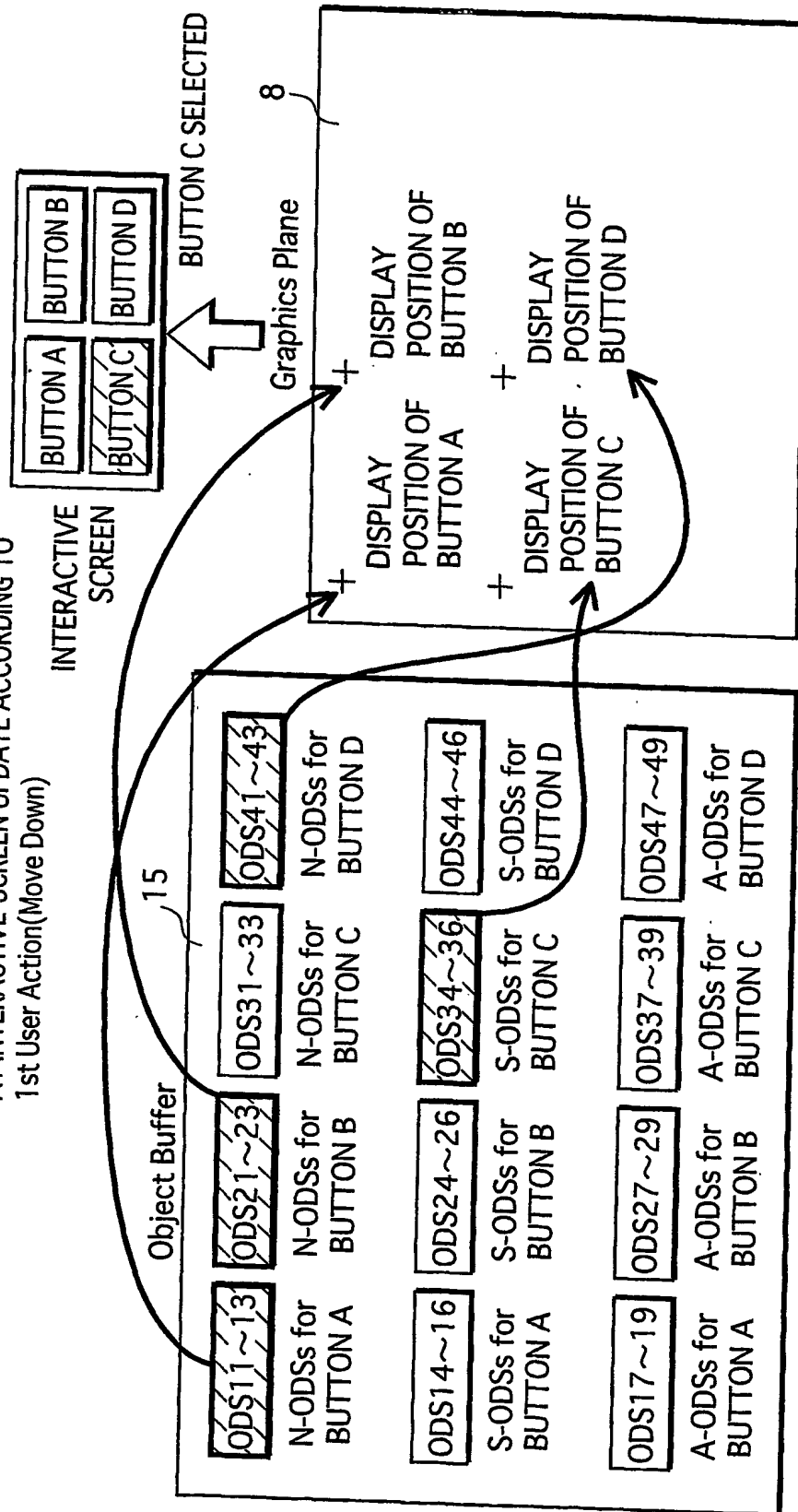


FIG. 61

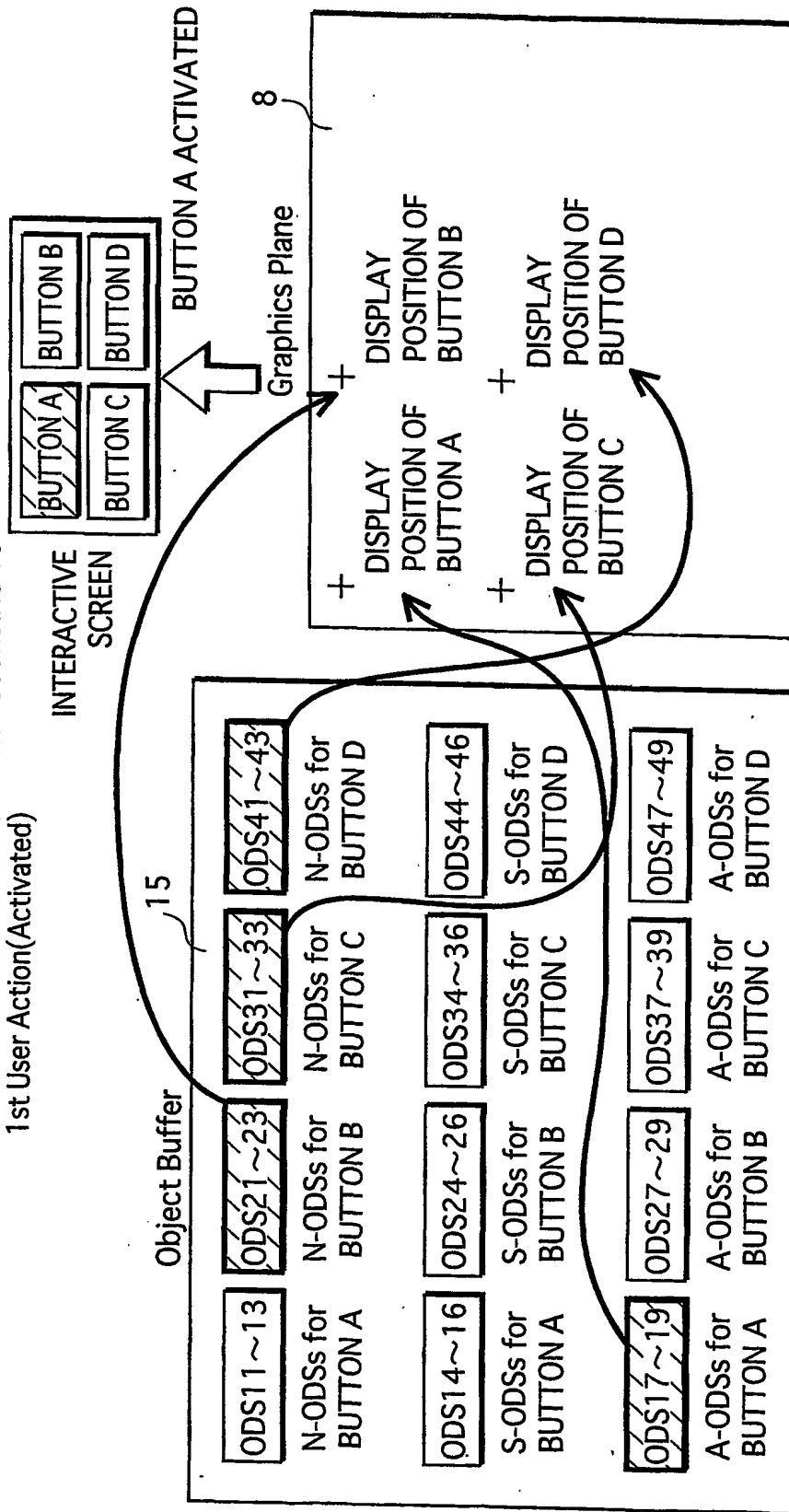
WRITE OPERATION OF Graphics Controller
AT INTERACTIVE-SCREEN UPDATE ACCORDING TO
1st User Action(Move Down)



DISPLAY POSITION OF BUTTON=DISPLAY POSITION DEFINED
BY button_horizontal position, button_vertical_position
OF BUTTON INFORMATION

FIG. 62

WRITE OPERATION OF Graphics Controller
AT INTERACTIVE-SCREEN UPDATE ACCORDING TO
1st User Action(Activated)



DISPLAY POSITION OF BUTTON=DISPLAY POSITION DEFINED
BY button_horizontal position, button_vertical_position
OF BUTTON INFORMATION

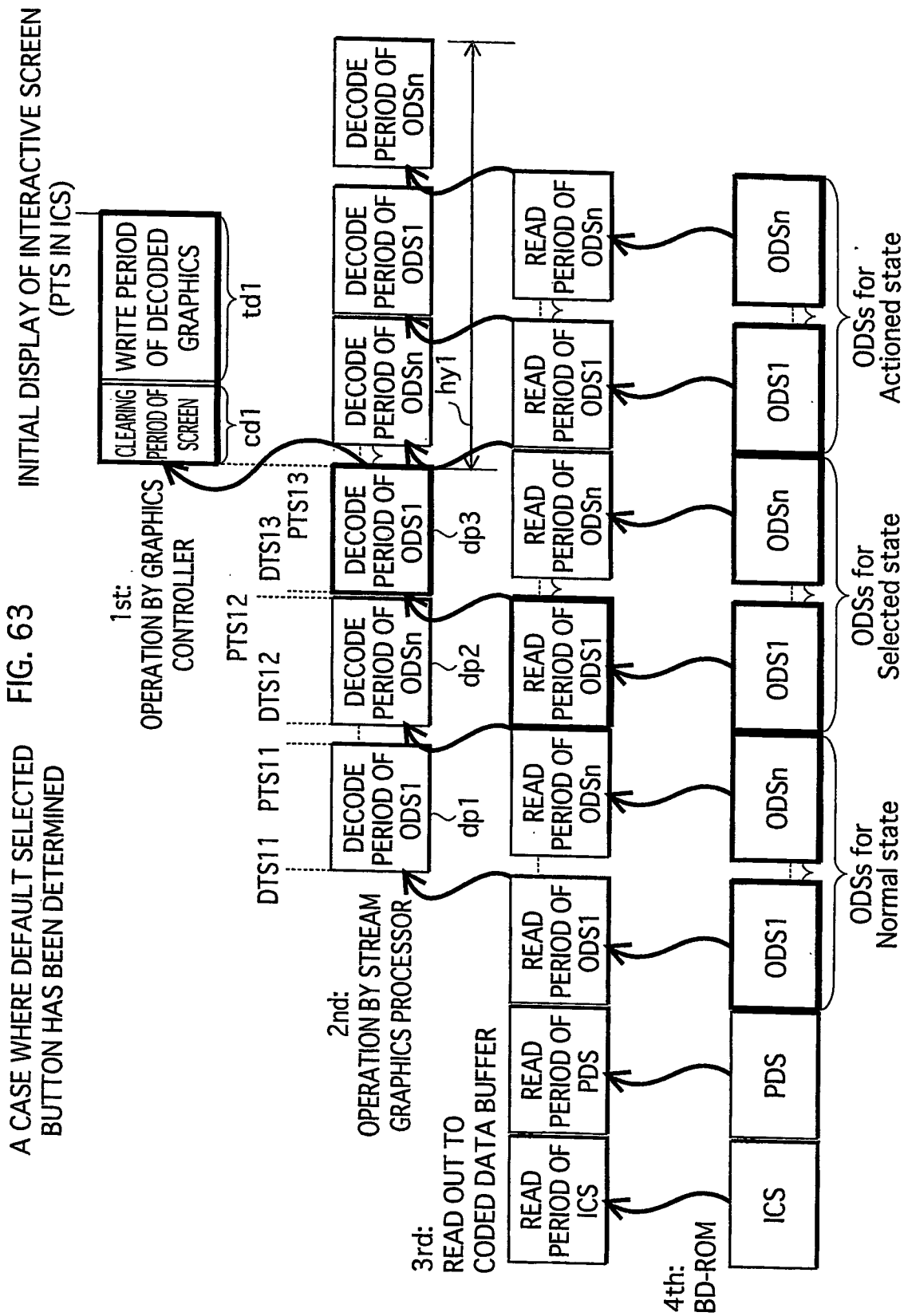
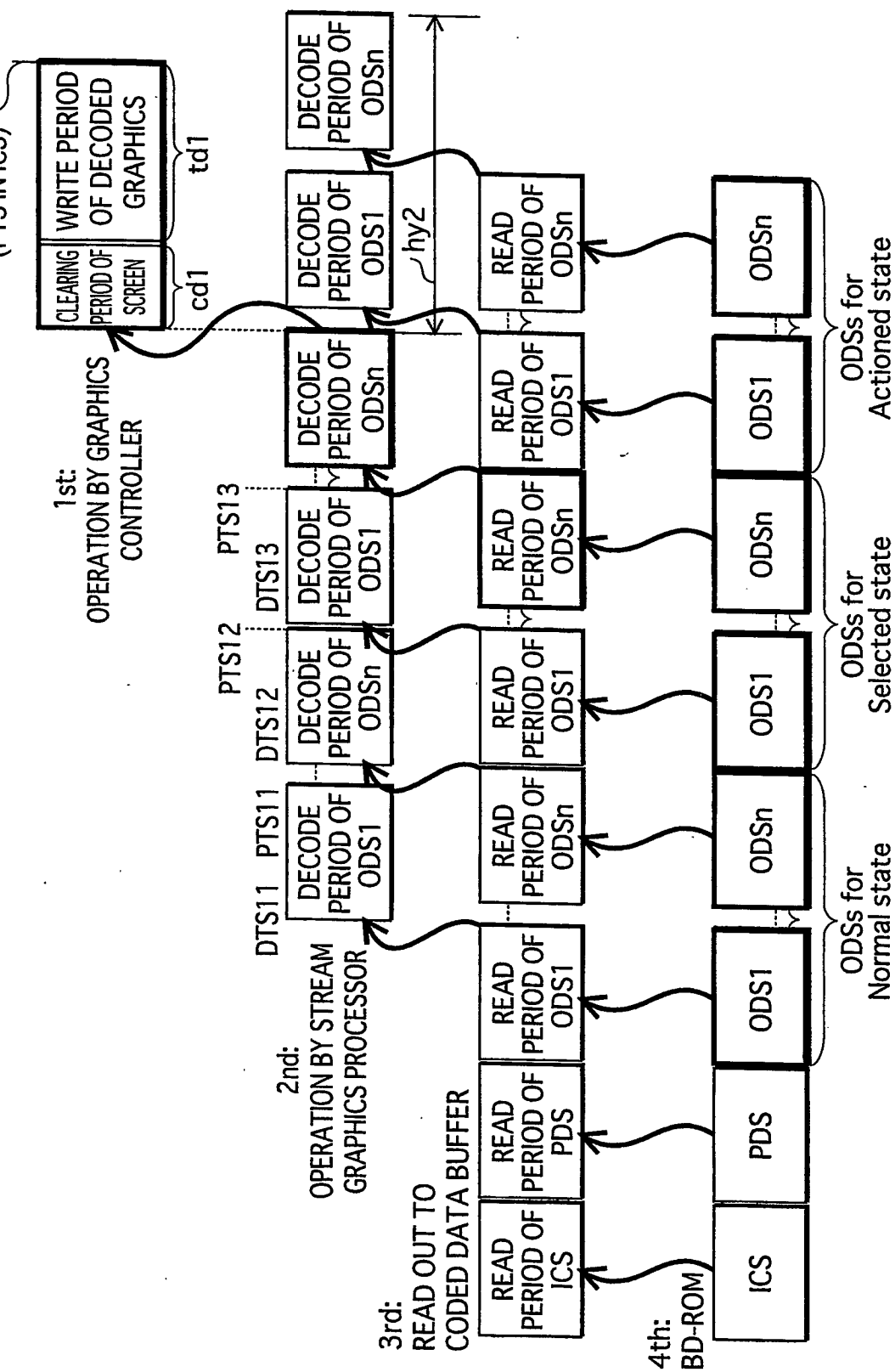


FIG. 64
A CASE WHERE DEFAULT SELECTED
BUTTON HAS NOT BEEN DETERMINED

INITIAL DISPLAY OF INTERACTIVE SCREEN



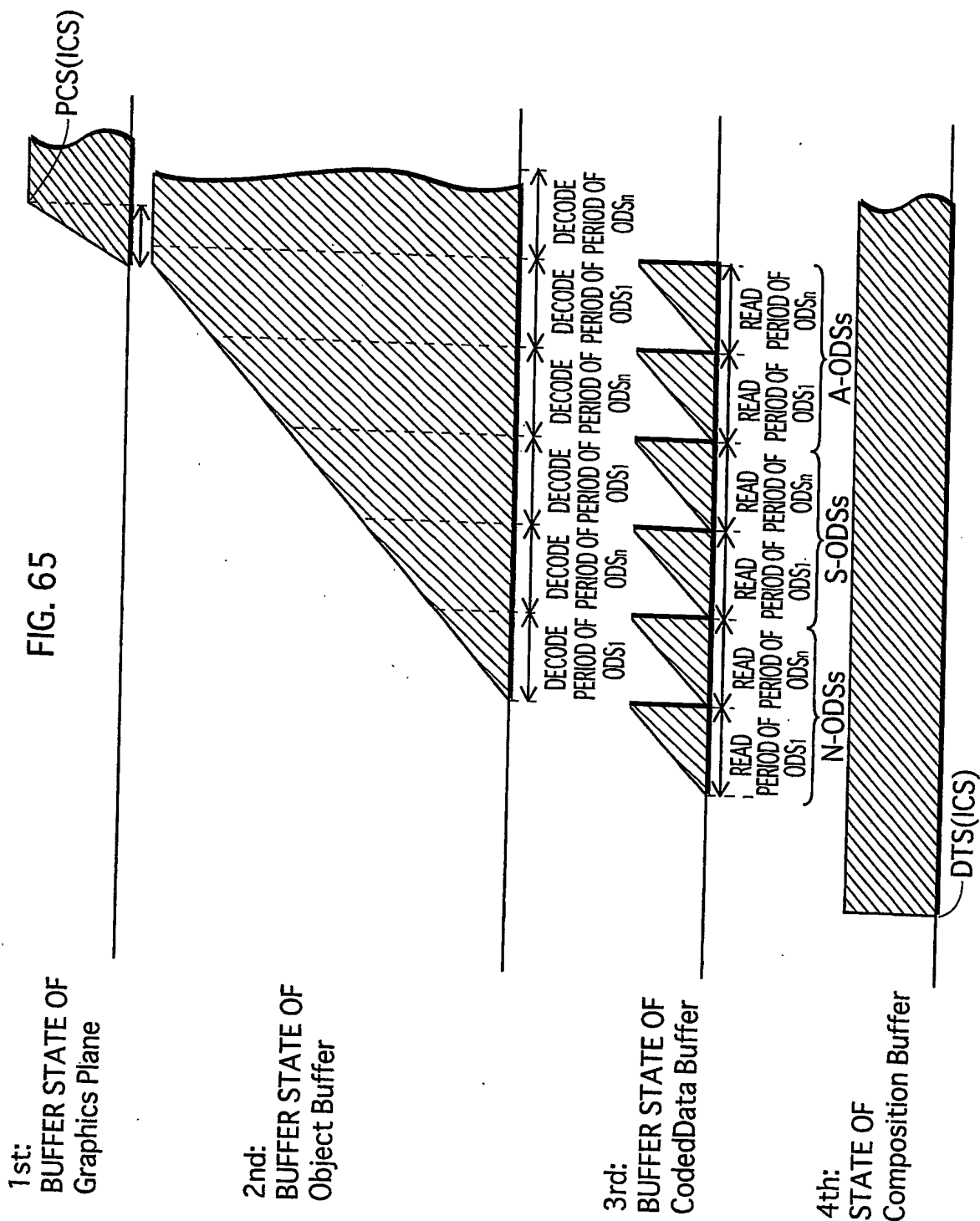


FIG. 66

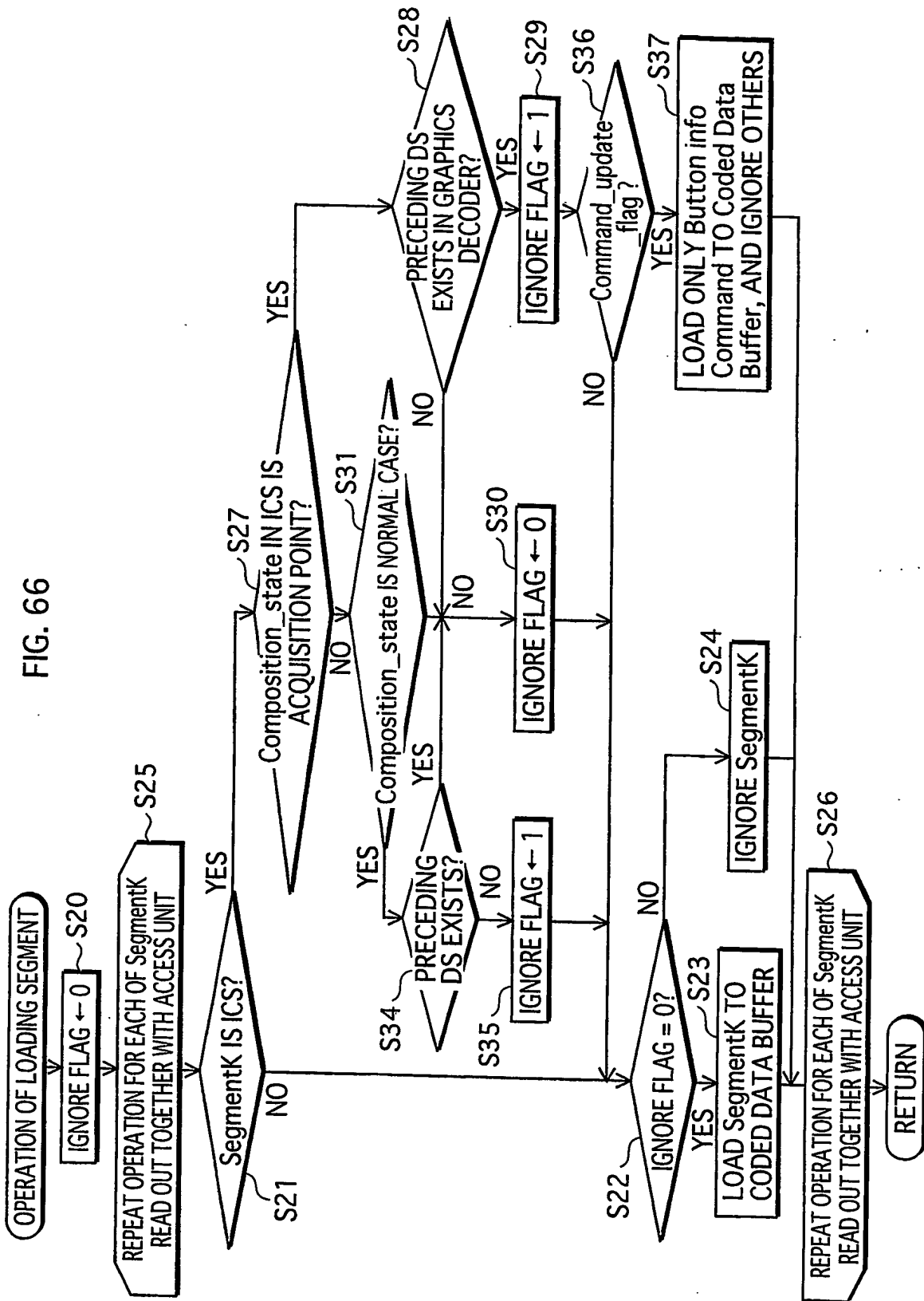


FIG. 67

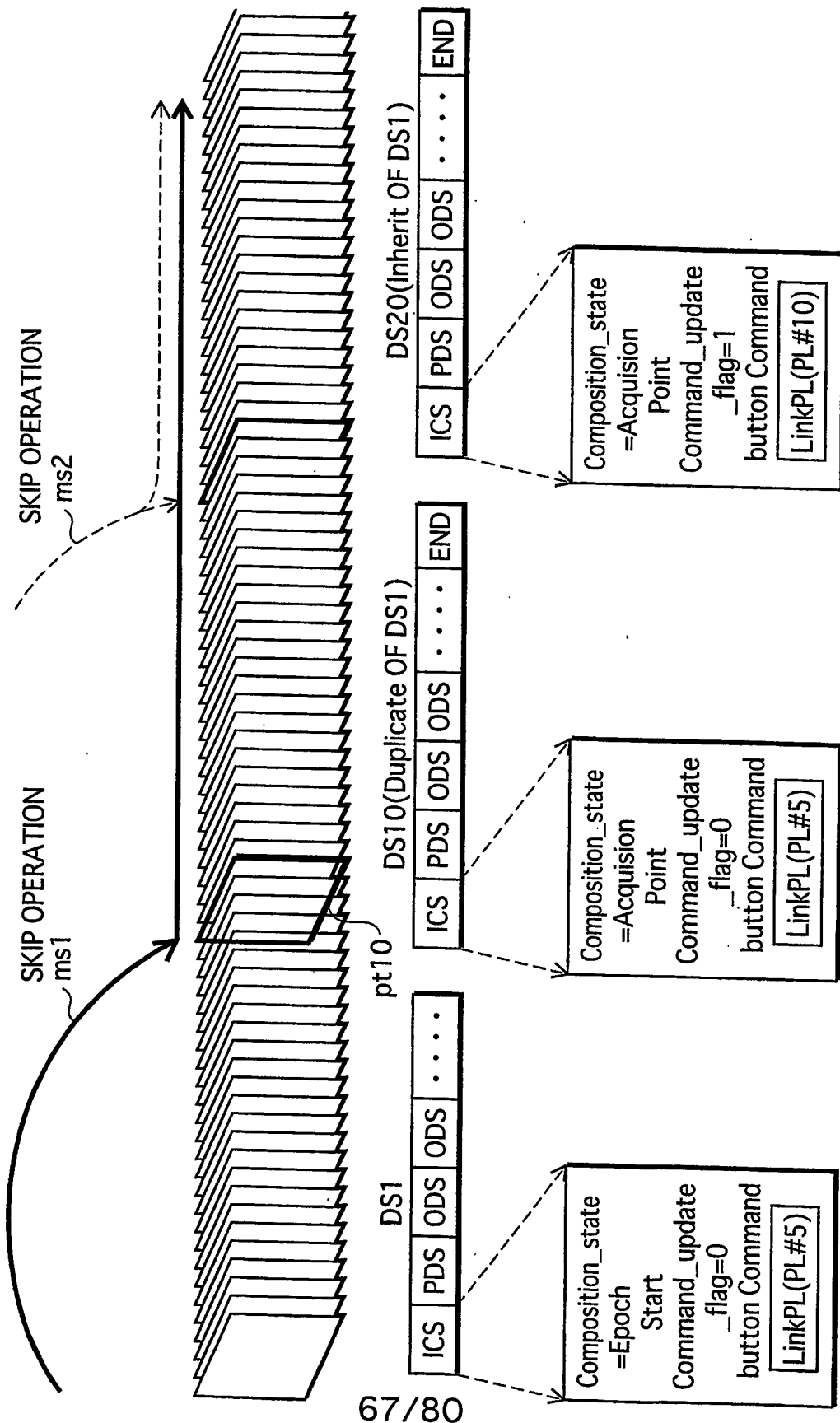


FIG. 68

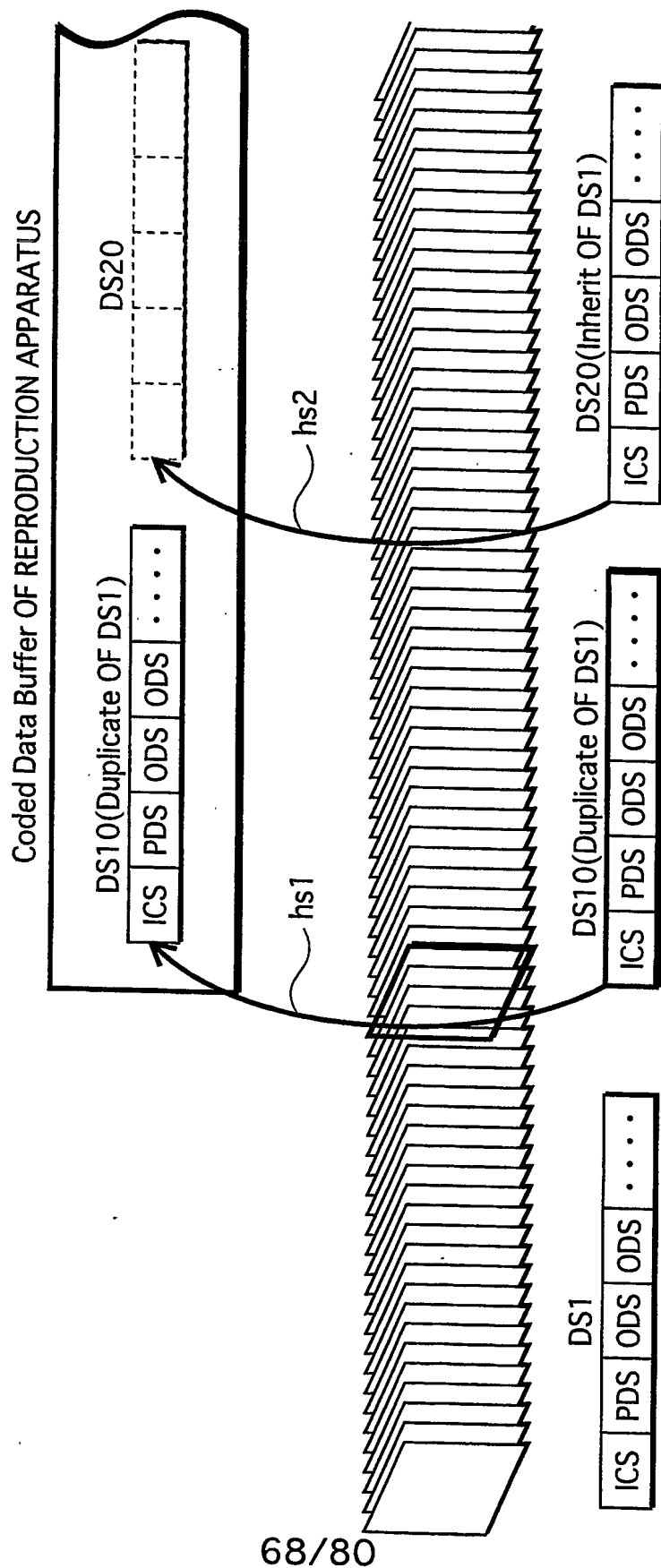


FIG. 69

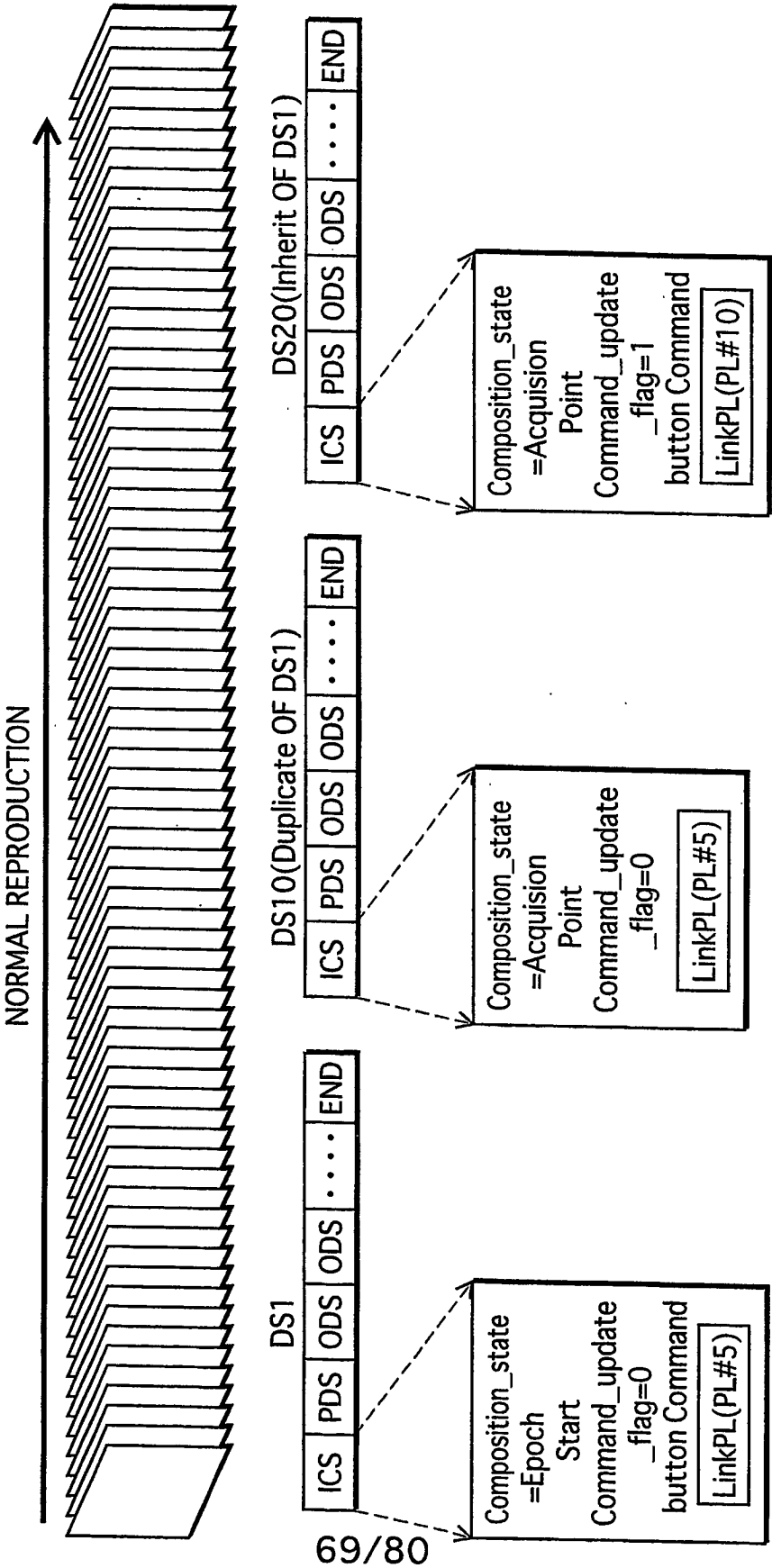


FIG. 70

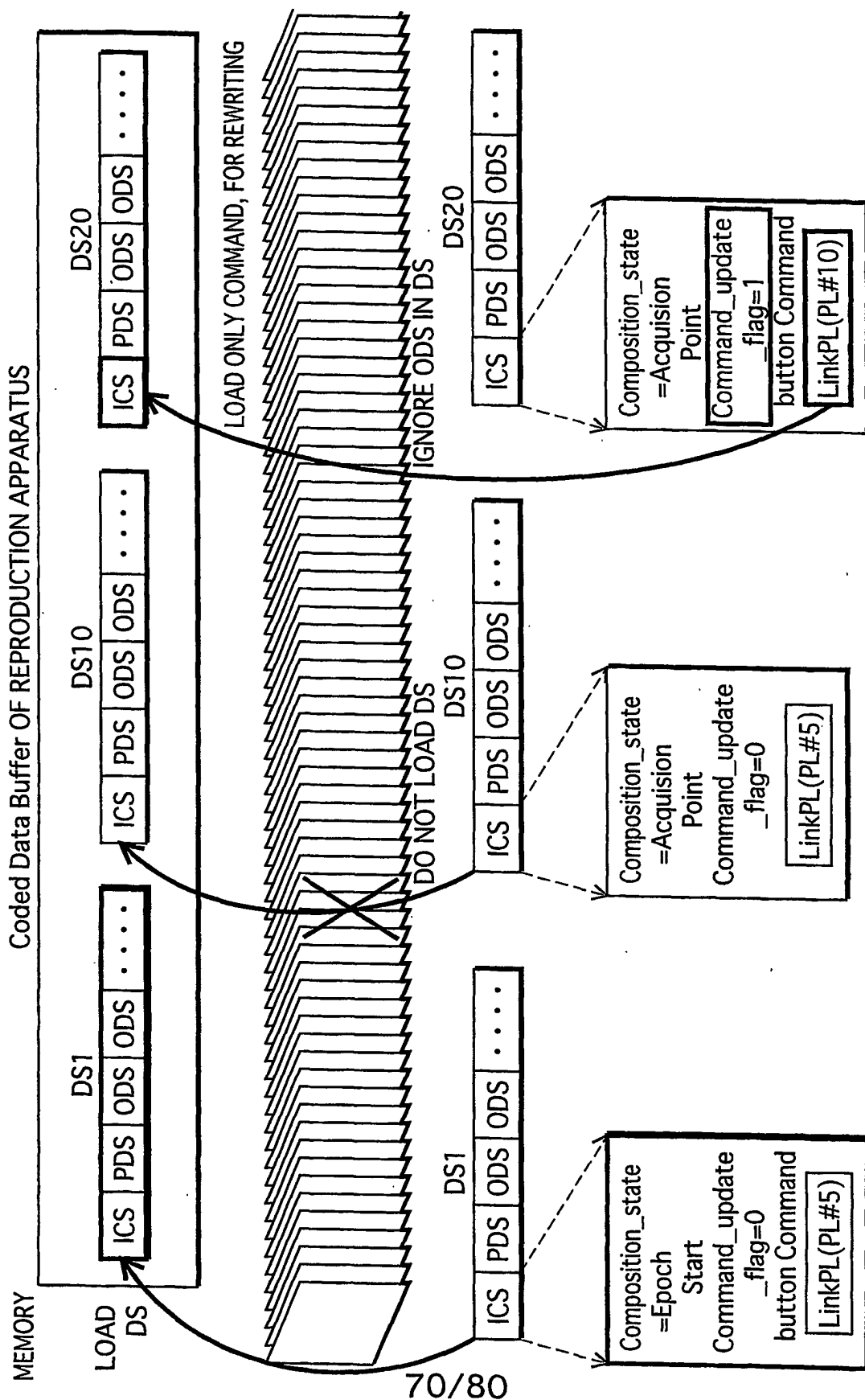


FIG.71

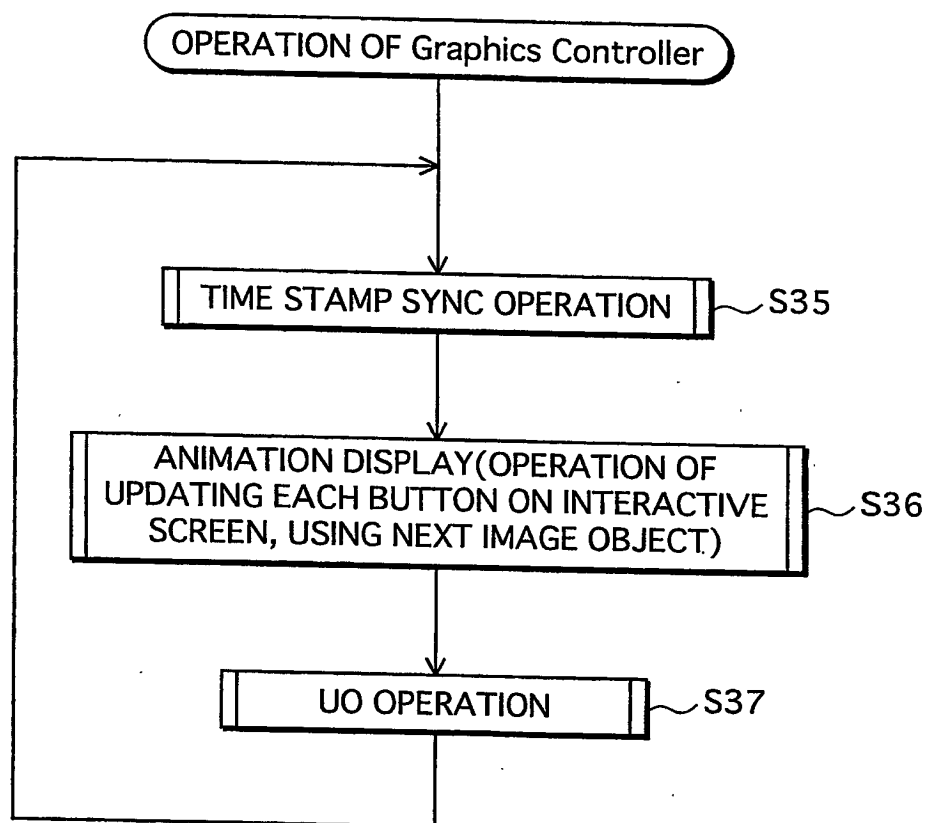


FIG.72

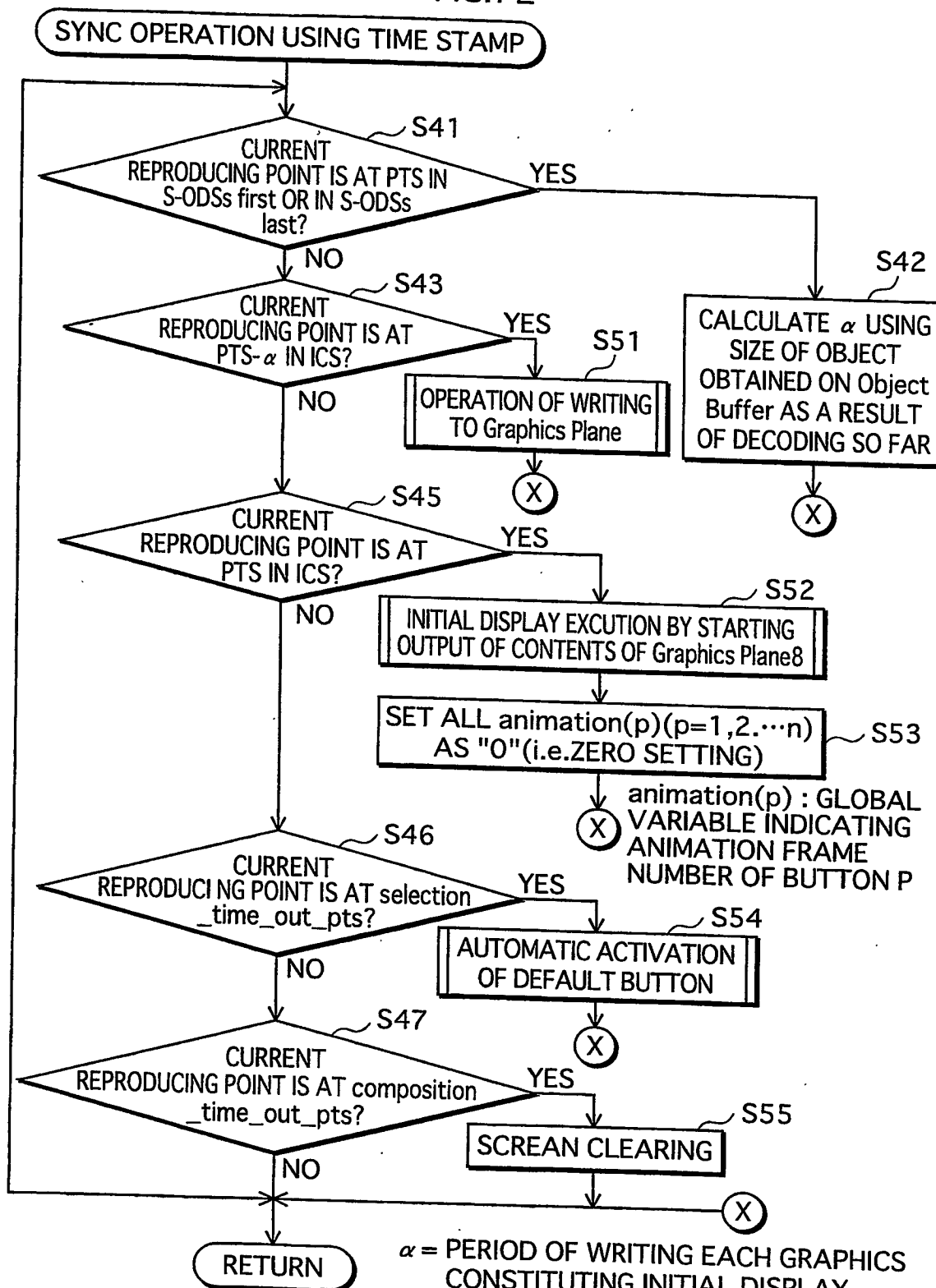


FIG. 73

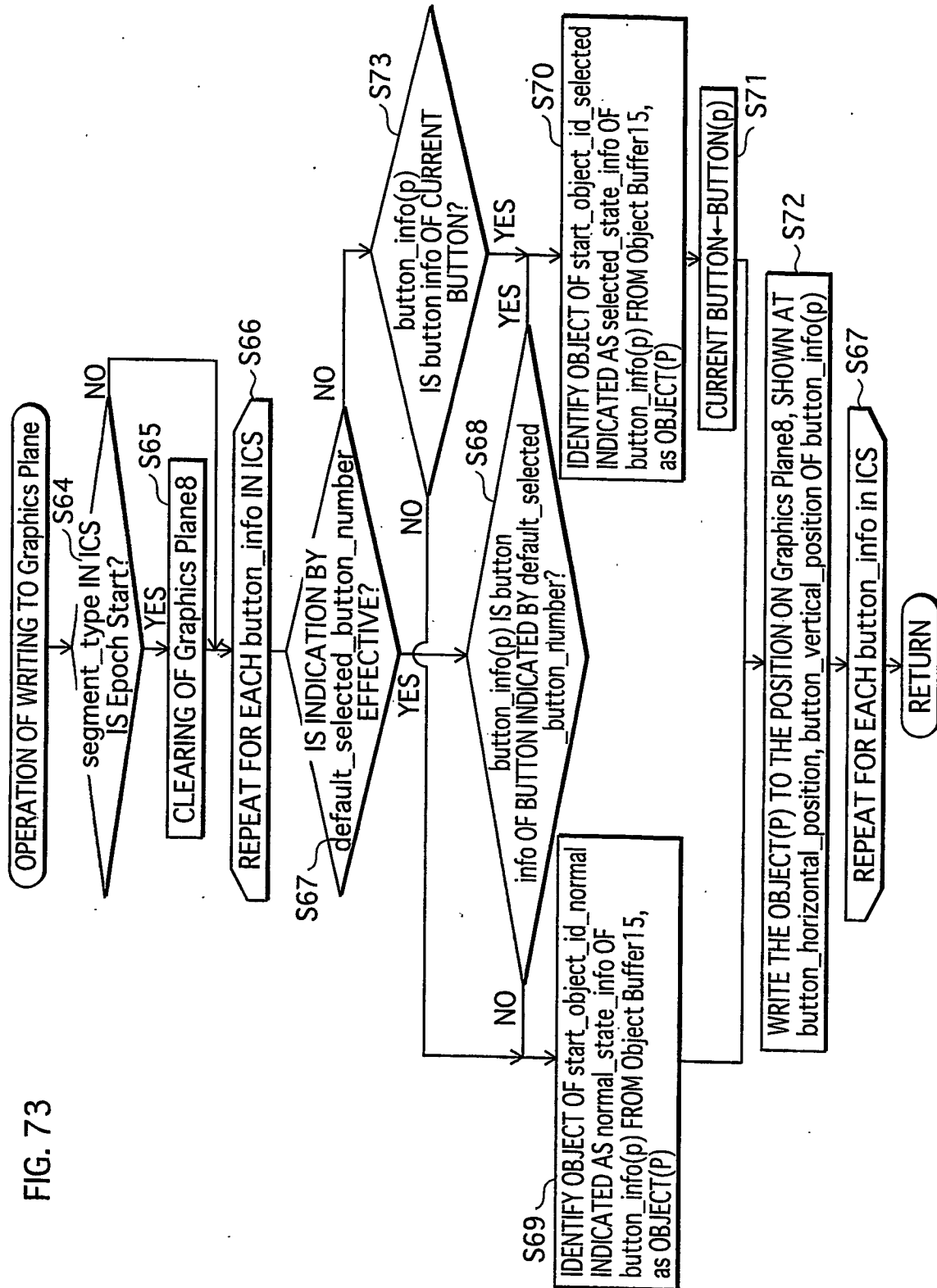


FIG.74

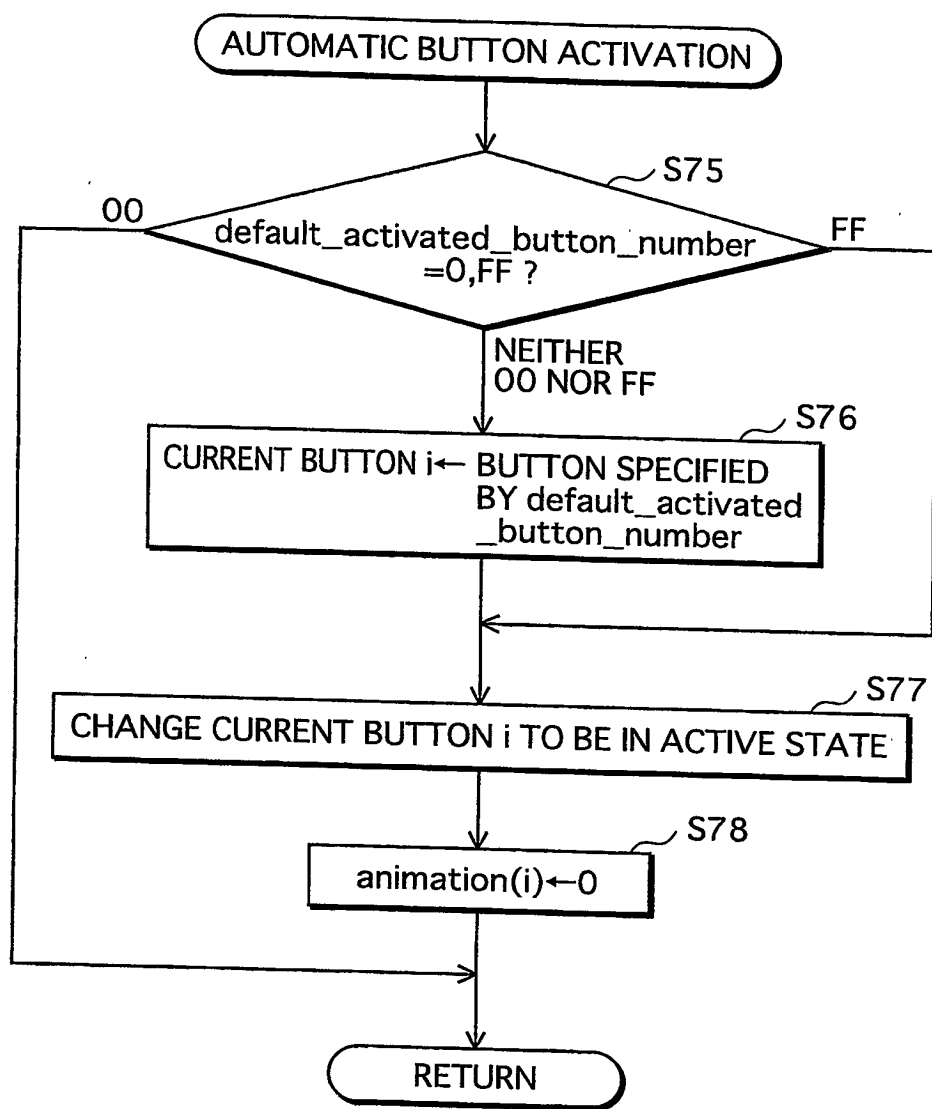


FIG.75

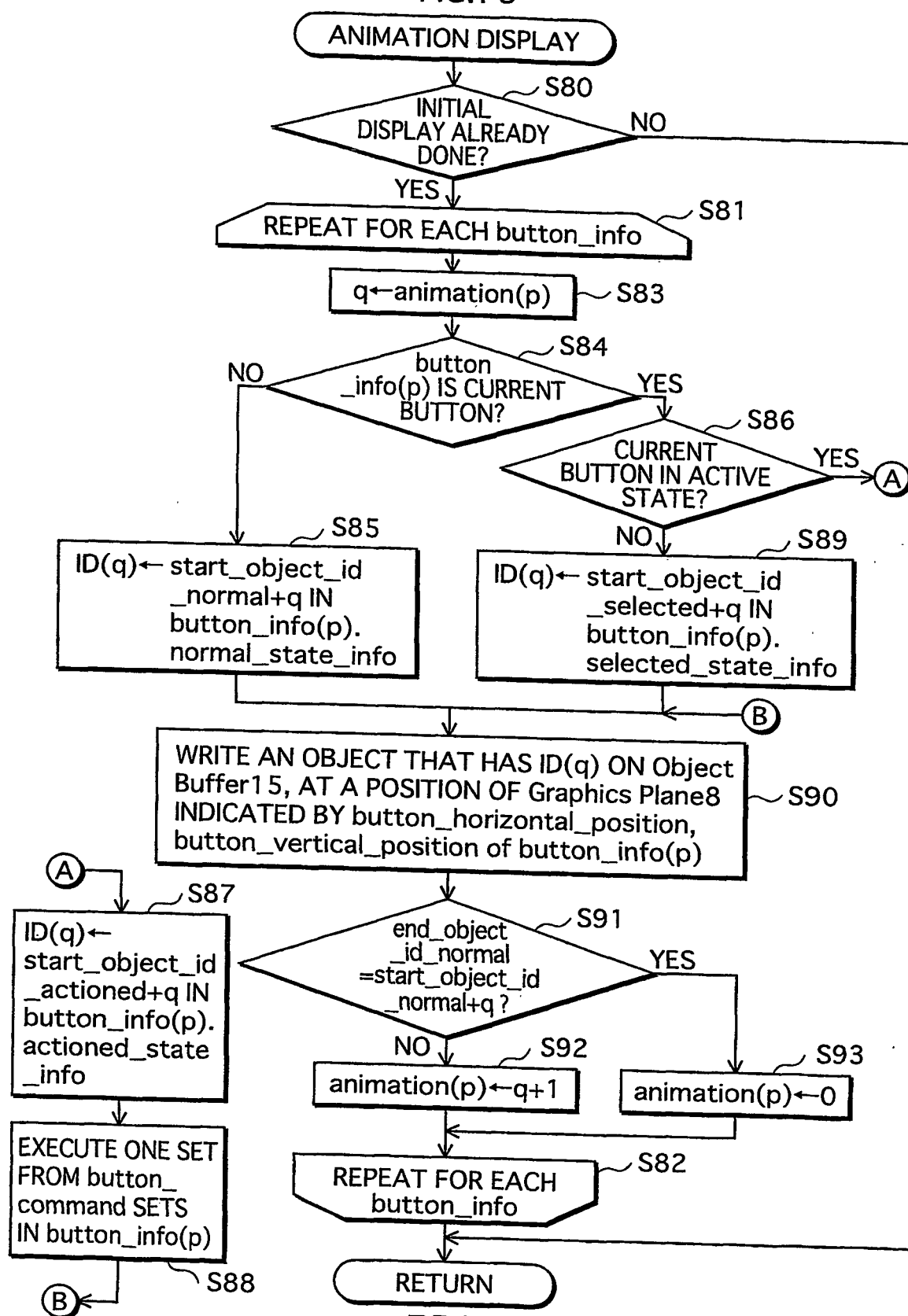


FIG. 76

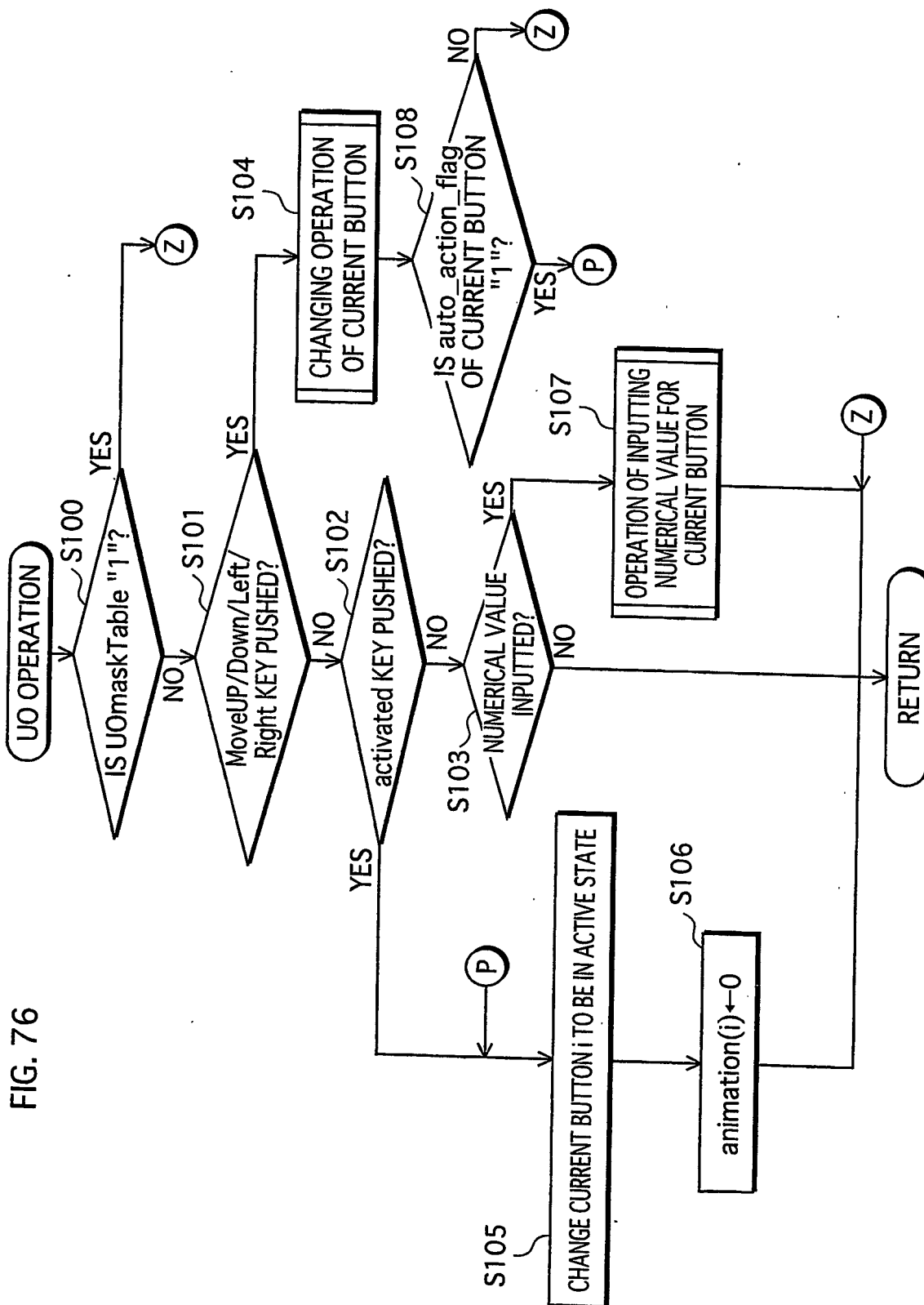


FIG. 77

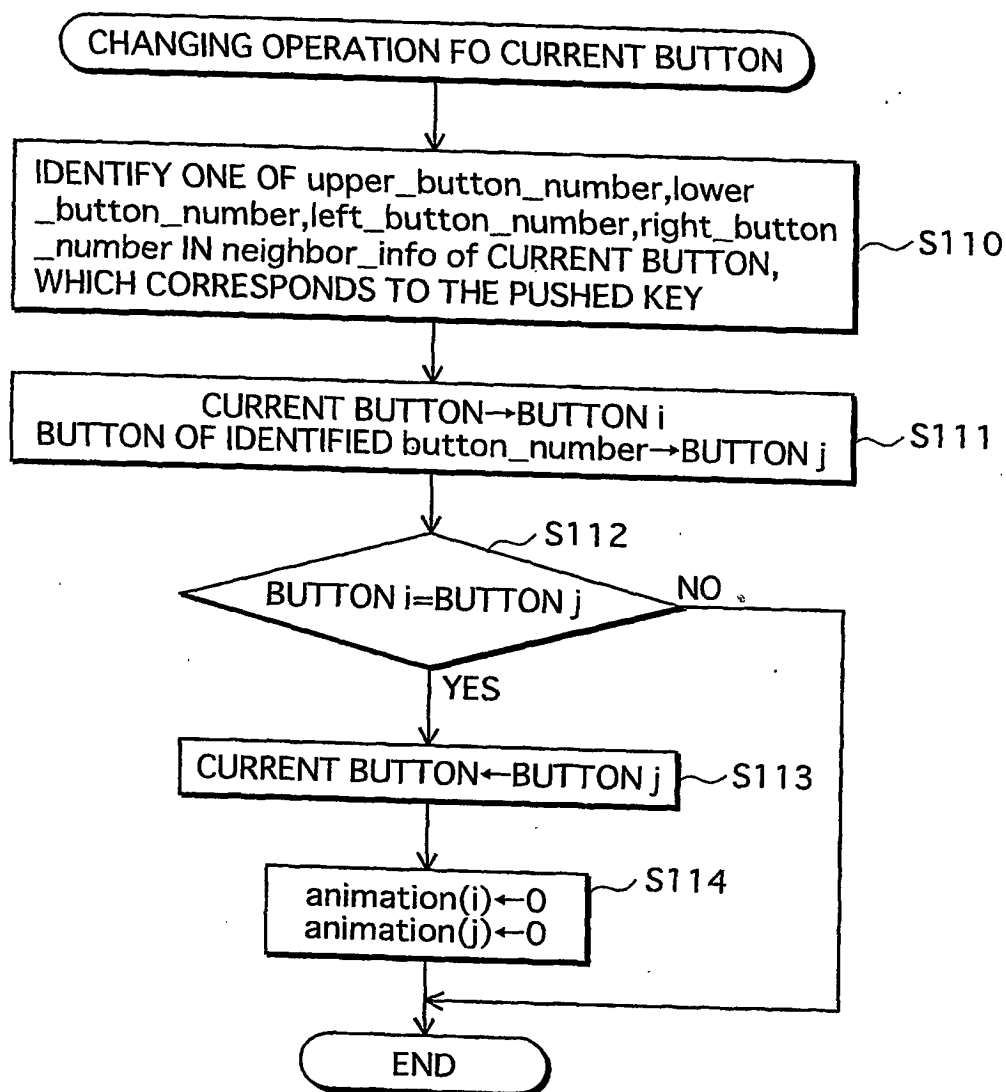


FIG. 78

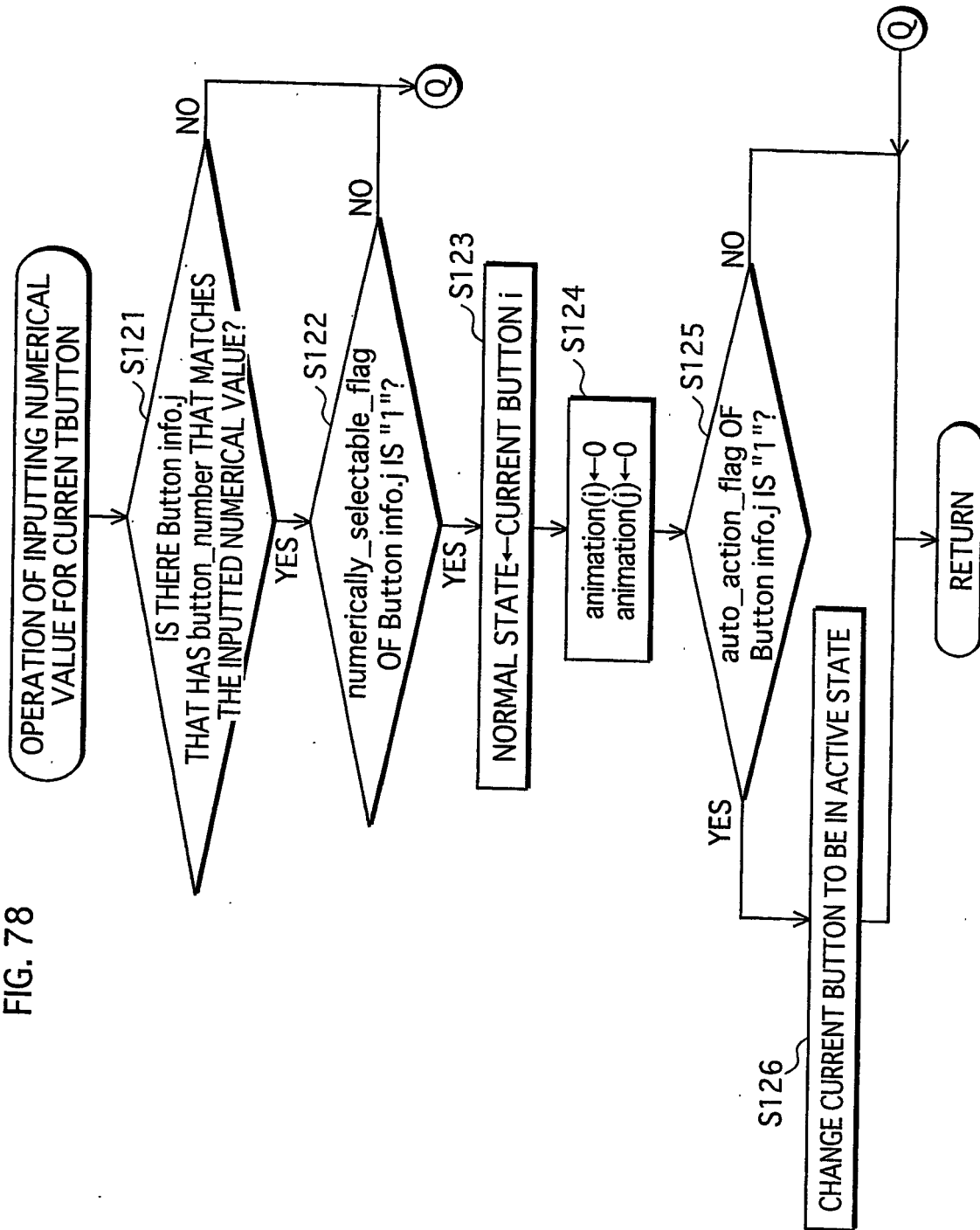


FIG. 79

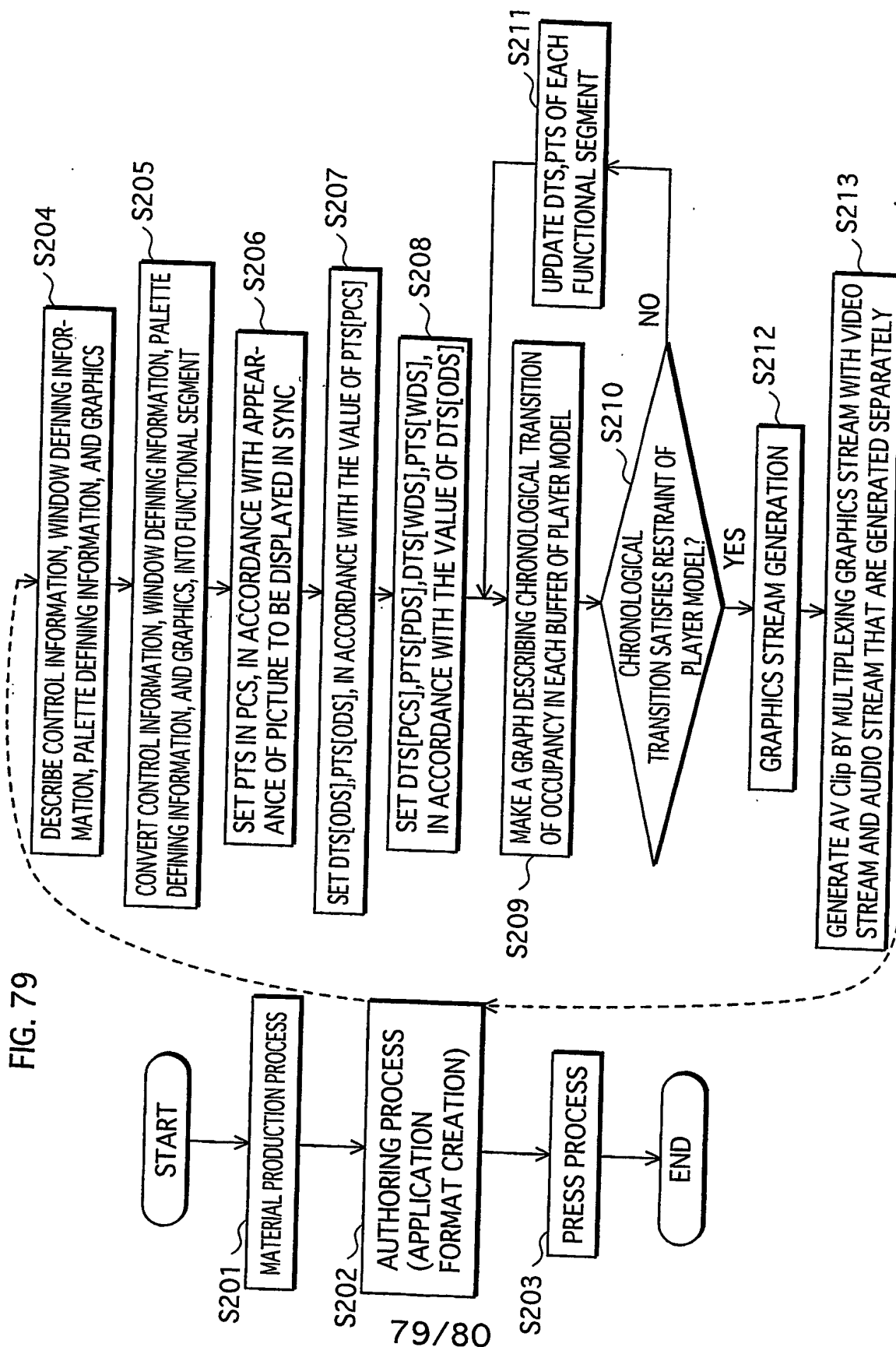


FIG. 80

